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PROFESSIONAL OVERVIEW

Dr. Menas C. Kafatos is The Fletcher Jones Endowed Professor of Computational Physics at Chapman University & Director of Institute for Earth, Computing, Human and Observing (Institute for ECHO). Author, physicist, philosopher, works on the environment, climate change and its effects; in natural hazards, including wildfires, pollution, storms, droughts; expert on quantum mechanics, cosmology, measurement and the role of the mind. He is one of few geo scientists who has worked on both Earth and space/astronomy, as well as data information systems for both Earth and space science. He works extensively and leads projects in all areas of hazards: Wildfires; droughts; dust transport; hurricane modeling; as well as impacts of climate change on agriculture and natural ecosystems. Climate related research, including seasonal to inter annual variability and effects on vegetation; climate change impacts on agriculture; connection of climate, possible impacts on hurricanes, dust storms and wildfires.

He received his B.A. in Physics from Cornell University in 1967 and his Ph.D. in Physics from the Massachusetts Institute of Technology in 1972. After postdoctoral work at NASA Goddard Space Flight Center, he joined George Mason University and was University Professor of Interdisciplinary Sciences from 1984-2008, where he also served as Dean of the School of Computational Sciences and Director of the Center for Earth Observing and Space Research. He and a team of computational scientists joined Chapman University in fall, 2008. He is the Founding Dean of the Schmid College of Science and Technology at Chapman University, serving as dean in 2009- 2012. He directs the Institute for Earth, Computing, Human and Observing. He has more than 45 years of experience in undergraduate and graduate teaching and research. He has published numerous books, and more than 340 articles in computational science, astrophysics, Earth systems science, hazards and global climate change, regional impacts of climate change, environmental issues, general relativity, cosmology, foundations of quantum theory, and consciousness, many in high impact journals and top reputation journals such as two in each, *Nature* and *Scientific American*. **Research Gate** in its database lists **445+** publications under his name with **RG Score: 43.17; h-index: 52. Refereed Publications: 349** (listed here) which include refereed journal articles, refereed book chapters, and refereed published proceedings. **Books: 23. Citations: 9,821 +** (*Research Gate*, 2021). **Highest Citation of single article: 500**. He is recipient of the Rustum Roy Award from the Chopra Foundation, February 2011, which “honors individuals whose devotion and commitment to their passion for finding answers in their field is matched only by their commitment to humanity”; an honorary member of the Romanian Academy of Sciences; Member, Board of Trustees, Universities Space Research Association (USRA), 2006-2008; Member, OCTANe Board, 2010-2013; Member, American Hellenic Council, 2011-present; President, 2014-2018; President, Friends of Sivananda Ashram Yoga in the Caribbean, 2020- present; IEEE Orange County Chapter - Outstanding Leadership and Professional Service Award, October, 2011, etc. He has been interviewed numerous times by: U.S. national TV networks (ABC, KCBS, Voice of America), Korean and Greek TV networks (KBS1 in Korea; ERT, SKAI-Eco, in Greece; PIT in Cyprus; TV and radio stations in Crete, cretalive, tv CRETA, Krete tv), national and regional newspapers and radios in Korea, (*Hankook*), Greece (*Kathimerini*, *Eleutherotypia*, *Ethnos*, *Patris*), and the United States (*National Herald*, *OC Register*, *L.A. Times*, *Washington Post*, *Atlanta Journal*, *Korea Times*).

Leader of innovative interdisciplinary programs which impact education at all levels including Masters and doctoral programs in Earth and Space and computational systems at both George Mason University (GMU) and Chapman University (CU). Real life applications for the benefit of society such as collaborating with the Institute of Geodynamics in Greece, monitoring stations for pre-earthquake seismic activity, and similar system in CA. Accomplishments in other areas include quantum mechanics, philosophy, social sciences and related fields. Popular writer with NY Times Bestseller book, wide exposure to media and interviews (YouTube, Blogs, FaceBook, Twitter, featured in national and international media). Institute for ECHO XLB Download Antenna, RS data including MODIS, NPP, NOAA AVHRR, AIRS, AMSRE and Fengyun.

University of Wisconsin-Madison is utilizing CEESMO now ECHO data pushed to a shared FTP, natural hazards, and RS.

Several collaborations and many MOUs over the years with a number of universities and international institutions are listed: University of Athens. California Institute of Integral Studies. In Korea, working with Dr. Seung Hee Kim, Associate Director, Institute for ECHO and Dr. Keun Hang Susan Yang: Ewha Woman's University, Korea University, Chungnam National University, Kyungpook National University, Kyung Hee University, Seoul National University. NASA. National Observatory of Athens and the Institute of Geodynamics. Working with Dr. Dimitar Ouzounov, Institute for ECHO: Academia Sinica, Taiwan. Chiba University, Japan. University of Basilicata, Italy. Working with Dr. Son V. Nghiem, JPL: Space Technology Application Center at Vietnam National Space Center (VNSC), National Institute of Oceanography, Vietnam Academy of Science and Technology (VAST). And several other international institutions. As dean and vice provost, he promoted interdisciplinary educational and research projects. Leader of many fundamental and applied science grants. His doctoral thesis advisor was the renowned M.I.T. professor Philip Morrison who studied under J. Robert Oppenheimer. Author of 345 articles, author, co-author or editor of 22 books, including *Looking In, Seeing Out* (Theosophical Publishing House, 1991), *The Non-local Universe* (Oxford, 1999), *The Conscious Universe* (Springer, 2nd edition, 2000), *Principles of Integrative Science* (edit. with Mihai Draganescu, Romanian Academy of Sciences Press, 2003), *Living the Living Presence* (in Greek, Melissa, 2017; and in Korean, *Miruksa Press*, 2016), *Science, reality & everyday life* (in Greek and English, Asimakis 2019, 2020); co-author with Deepak Chopra of the NY Times Bestseller *You are the Universe* (Harmony/Random House/Penguin, 2017, translated into many languages and countries). Member of foreign national academies, the Korean Academy of Science and Technology (KAST), the Romanian Academy of Science; collaborates with the Chinese Academy of Sciences.

TEDx Athens 2022 Speaker, 28 May 2022 on Exalted Mind, Science, Reality & Everyday Life.

Grant 2022 – 2024

FEDERAL AWARD IDENTIFICATION NO 80NSSC22K0215

SUPPLEMENT NUMBER P00001

PERIOD OF PERFORMANCE 12/01/2022 - 12/31/2024

The project's objective is to improve sea surface salinity (SSS) satellite products through improved radiative transfer model and sensor calibration. The retrieval algorithms for the Soil Moisture Active Passive (SMAP) and Aquarius missions will be assessed by comparison with in situ salinity measurements and SSS from a numerical ocean general circulation model. The radiative transfer model and the sensor calibration will be modified in order to improve the accuracy of the SSS retrievals. Some of the issues to be investigated include a residual sea surface temperature (SST)-dependent bias on the SMAP and Aquarius SSS, variation of the SSS bias in the Southern Ocean with the antenna scan angle of SMAP, and the impact of SMAP calibration uncertainty during eclipse season on the SSS retrievals. The investigation will assess the impact on the SSS retrieval of uncertainties in the models for the dielectric constant of sea water, the ancillary sea surface temperature, sea surface roughness and foam models and atmospheric corrections. Another aspect of the project is to quantify the improvements in SSS retrievals at high latitudes and cold waters that would be achieved by use of a multi-frequency wideband radiometer. This will be investigated by extending the forward models currently used at 1.4 GHz to a wider range of frequencies (300 MHz 7 GHz). The model will be used to generate synthetic observations at multiple frequencies, polarizations, and incidence angles. Noise and biases will be added

to the synthetic observations, and the performance of geophysical parameter retrievals will be evaluated for various combination of frequency, polarization, and incidence angles.

\$198,879.00 Incrementally Funded Amount \$198,879.00 Purchase Requisition: 4200784900

Fund: SCEX22021D Appropriation: 8021/220120 Amount: **\$198,879.00**

Comments Related to Scholarly/Creative Work and Service

- Visit to Institute for Basic Science (IBS) in South Korea
December 27,2022

Institute for Basic Science (IBS) is a Korean government-funded research institute that conducts basic science research and relevant pure basic research. From December 2018, the IBS Center for Climate Physics, headed by Axel Timmermann, began to utilize a 1.43 petaflop CrayXC50 supercomputer, named Aleph, for climate physics research.

- Visit to Chungnam National University
December 28,2022

Chungnam National University (CNU), founded in 1952, has been performing a key role as the most prestigious national university in the central region of Korea. <http://plus.cnu.ac.kr/html/en/>

- American Community Schools (ACS) Athens in Greece
May 30, 2022

Invited by president of ACS Athens, Dr. Peggy Pelonis, to discuss future collaborations between ECHO at Chapman and ACS Athens. Chapman has sent many students to ACS Athens several times and both institutions have close relationship for many years. Kafatos gave a talk on Explaining the Nature of the Universe, which was recorded and distributed to public via social media links such as Facebook, LinkedIn, Instagram, and Twitter. <https://www.theinstitute.gr/ks/explaining-the-nature-of-the-universe/>

ACS Athens is K-12 American international school developing global citizens. ACS Athens is located in a suburb of Athens and minutes away from Classical Athens and the birthplace of Western Civilization. The educational philosophy is based on the American curriculum, principles, and values, and the language of instruction is English, though Greek is also taught as a second language. The Institute of ACS Athens aims to become a global hub to advance the power of K-12 international education as a means for a positive impact in the world. We spark learning through research and innovation by creating tools and programs to prepare individuals to thrive in a transforming world.

- TEDxAthens 2022: The Great Unknown at Stavros Niarchos Foundation Cultural Center
May 28, 2022

Kafatos was one of keynote speakers at the TEDxAthens 2022. He gave a talk on Exalted Mind; Science, Reality, and Everyday Life at Stavros Niarchos Foundation Cultural Center where 1,500 people attended. I participated in a discussion section where Q&A occurred between speakers and audiences.

TEDxAthens is a world-class conference about Innovation, Creativity and Ideas based in Athens, Greece. *TEDxAthens* is one of the first TEDx events worldwide and a world-class conference about Innovation, Creativity and Ideas based in Athens. It creates unique gatherings and events designed to catalyze and stimulate creativity, entrepreneurship, social change and inclusion. *TEDxAthens* is a proud member of TED's independently organized TEDx events program, and the first ever TEDx event in Greece, established in May 2009. It amplifies great ideas worth sharing and implementing to the world. To date, it has curated more than 200 talks from world-renowned thinkers, doers and innovators. These talks have been viewed more than 7 million times online. It is, by acclamation, the most impactful and influential platform for ideas in Greece and the wider Balkans region.

- **NFT Korea 2022 conference**
August 26, 2022
<https://www.blockchainus.co.kr/news/articleView.html?idxno=3173>

Other Activities

August 2022

- Republic of Korean Air Force (ROKAF) Weather Wing and ECHO collaboration
- Visit with the Republic of Korean Air Force (ROKAF) in South Korea to sign MOU between ECHO at Chapman and ROKAF Weather Wing
- Visit to Kyung Hee University

Kyung Hee University (KHU), a private research university in South Korea with campuses in Seoul and Suwon. Founded in 1949, it is widely regarded as one of the best universities in South Korea. Kyung Hee University is part of the Kyung Hee University System, which offers comprehensive education from kindergarten through graduate school. As of 2020, about 33,000 students were enrolled in Kyung Hee University. The university consists of 24 undergraduate colleges, 1 general graduate school, 13 specialty graduate schools and 49 auxiliary research institutions. The university offers a study abroad program in partnership with 434 sister universities in 69 countries.

<https://www.khu.ac.kr/eng/main/index.do>

BASIC OUTLOOK PROMOTING COLLABORATIONS BETWEEN DISCIPLINES & THE IMPORTANCE OF THE QUANTUM PARADIGM AND CONSCIOUSNESS

Passages from abstracts from some recent workshops and invited lectures are indicative of the world view and the means to achieve it. Kafatos espouses:

Quantum and Mind

Quantum mechanics brought in the role of observation in a primary way, and the participatory universe of John A. Wheeler is a natural consequence of measurement theory in the standard John von Neumann quantum view established more than 80 years ago. Scientific works have confirmed the correctness of quantum mechanical predictions. Quantum theory in its foundations implies a primary role for the mind and interactions of observers with objects under observation. Yet, despite profound experimental results confirming quantum physics, neuroscience assigns mental activity to physical processes and seeks explanations with no obvious role for the observer or agency implied by quantum physics.

The emerging view proposed by Kafatos is that entanglement, nonlocality and coherent structures are all manifestations of the universe which is basically living and conscious. Consciousness manifesting as awareness, of objects and the observing agent, is *primary*, rather than derived through blind processes as current materialist approaches claim. Entanglement is the natural feature of the primacy of consciousness, operating through three fundamental Natural Laws of complementarity; creative interactivity or sentience; and recursion or universality. The main issue is not how such the universe is nonlocal and entangled but rather *how it appears* as made of distinct, physical objects. What is proposed is that the mind creates a veiling of undivided wholeness. New advances in mathematics shed light on the observer-observed relationships in quantum mechanics, quantum-like processes in biology and cognition. The application of fundamental principles of consciousness will form the cornerstones of the emergence of *Observer-based Science*, distinguishing it, but complementary to, current *Object-based Science*. Not only will science emerge and advance to new heights, a true synthesis involving our fragmented world views will emerge. This is sorely needed for human life and wellbeing. It is the new but also ancient vision of non-duality which Kafatos believes should pass on to the next generations.

Philosophy, Conscious Awareness and Qualia

The sublime teachings of ancient monistic philosophies have provided humanity with great insights about the nature of Reality as the underlying Consciousness. The universe is much richer than our senses tell us. The underlying reality is universal Consciousness, operating at every level of existence of the universe, founded on the fundamental I-awareness, which is the true Self. The Self projects the universe out of its own infinite existence, conforming to a set of Natural Laws, in what appear as infinite numbers of objects. It never loses its own I-ness. Qualia, the collection of vast numbers of subjective experiences, are fundamental as all objects are known and experienced.

SPECIAL PROJECTS

As Vice Chancellor and Dean, he and his team members launched several initiatives of collaboration at the university and with international institutions, federal laboratories and other U.S. universities, including Korea University, Ewha Womans University, National Observatory of Athens, etc. He is considered a world's expert in computational sciences and leader in establishing new degree programs.

During his term as Dean of the Schmid College of Science and Technology, the University raised \$21M for the science building and \$5M for programmatic support in the sciences (from foundations, private donors, and industry). At George Mason University he raised more than \$52M in grants from 1990-2008, an average of \$2.9M/year. At Chapman University, he has so far raised more than \$1.2M in grants over 4 years.

INSTITUTE, INSTITUTE FOR EARTH, COMPUTING, HUMAN AND OBSERVING (ECHO)

The Center of Excellence in Earth Systems Modeling & Observations (CEESMO) which has now in 2022 become a much more interdisciplinary and prestigious Institute, the Institute for Earth, Computing, Human and Observing (ECHO)

(<https://www.chapman.edu/research/institutes-and-centers/echo/index.aspx>). ECHO is an interdisciplinary research unit, part of the more interdisciplinary research programs, what may be described as applied, computational and fundamental sciences, including quantum mechanics. The Institute focuses on observations of the Earth and modeling and analyzing the Earth systems with particular emphasis on natural hazards such as wildfires, severe weather, floods, dust storms, and earthquakes, and regional

impacts of climate change, such as impacts on agriculture and natural ecosystems. As well as quantum-like models & applications in fundamental sciences. ECHO provides access to satellite data through its Remote Sensing and GIS lab utilizing advanced computational tools. It also provides access to advanced computing and model runs through the Henry Samueli Computational Laboratory.

Natural Hazards, Environment, Societal Impacts, Interdisciplinary Approaches to Consciousness & Reality and Special Events

- CEESMO and now ECHO is conducting research on wildfires with real life applications, for both pre-wildfire danger and post-fire hazard using RS, in-situ data & modeling. Studying the disruption caused by mega-fires on human society with crowdsourced data of population displacement, mobile network connectivity, and power outage. Under his leadership, ECHO collaborations with different agencies and stakeholders have emerged, with technical consultation, collaborations and services on aspects of wildfires: US Forest Service (USFS) (Decision-making management of large fires; Valuation of ecosystem services); NASA Jet Propulsion Laboratory (JPL) (Wildfire danger assessment using remote sensing dataset); Los Angeles and Orange County Fire Departments (Live Fuel Moisture (LFM) for estimating wildfire danger and forest management); Facebook, Data for Good (Spatio-temporal patterns of population displacement during and after mega-fires detected with social media; Community resilience towards wildfires and its socio-economic indication).
- Development of mathematical foundations for views of reality involving the mind and its role in both the quantum cosmos and in ancient philosophical systems, presented in 2019/2020 books <https://www.politeianet.gr/sygrafeas/kafatos-k-minas-104892>. Implications discussed at invited lectures e.g. Sages and Scientists (2019), in numerous talks and panels, including First International Conference on Science and God, Korea (2020) and follow-up conference (2021).
- Practical steps involving 8+1 Steps or Symphonies developed in 2018, their relevance to everyday life, the corona virus situation, and wellbeing have been and are widely presented to the public, such as: Invited Zoom session with 50+ employees of OC ECOS, Earth Friendly Products, Inc. in 2020 on the environment and COVID-19. Awareness, connection with understanding of one's nature, particularly for young people, using teleconferences, interviews, TV programs, and social media to reach worldwide audiences.
- Specific to COVID-19, CEESMO postdoc Dr. Jia presented work at Chapman Ask the Experts using Facebook, Data for Good for population movements. Work includes wildfires. Kafatos participated with colleagues as Convener of AGU session on wildfires December 2019.
- Ongoing discussions with stakeholders are being conducted for the possibility of a virtual institute between universities in consciousness studies & research. Kafatos organized a major conference on Copenhagen Interpretation and Consequences at Chapman in October 2019, co-sponsored with the President of Chapman University, Dr. Daniele Struppa, the California Institute of Integral Studies and Loyola Marymount University. During the conference, Dr. Henry P. Stapp was honored for his work in quantum physics and role of observations. Book manuscript *Quantum and Consciousness Revisited*, DK Publishers (2022) resulted.

<https://www.chapman.edu/our-faculty/menas-kafatos>

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Twitter: @mckafatos

LinkedIn: Menas Kafatos

INSTITUTE FOR EARTH, COMPUTING, HUMAN AND OBSERVING (ECHO)

[HTTPS://WWW.CHAPMAN.EDU/RESEARCH/INSTITUTES-AND-CENTERS/ECHO/INDEX.ASPX](https://www.chapman.edu/research/institutes-and-centers/echo/index.aspx)

RESEARCH INTERESTS/AREAS OF EXPERTISE

Earth System Science/Earth Observing/Remote Sensing

Interdisciplinary Earth system science; natural hazards and climate change; aerosols and pollution; vegetation and climate change coupling; effects of climate change on agriculture and natural ecosystems in the SW U.S. (primarily CA and AZ); wildfires and decision support systems (DSS) to mitigate risks; advance signatures of earthquakes in CA, Greece, Italy, Japan, Taiwan and China; Earth Observing System observations for science and applications.

Data Information Systems

Federated, distributed data information system architecture; content-based Earth science data browsing; user interfaces; distributed data systems and associated technologies.

Astrophysics and Space Sciences

Black holes, active galaxies and quasars; accretion hydrodynamics in curved space-time metrics; high-energy emission from cosmic sources; ultraviolet astronomy, symbiotic stars; electromagnetic processes; atomic physics.

Energy, Environment and Economy

Industry-academia initiatives for green technologies; impacts of climate change and hazards on regional economies; risk mitigation approaches; technology approaches for risk mitigation.

Cosmology

Cosmological redshifts, observations of distant parts of the universe and their limitations; Universal Diagrams; distant sources and Hubble Diagram; early universe, cosmology and superstring theories; variation of fundamental constants and particle physics.

Biology and Physics

Unifying biology and physics; first principles in biology; biological autonomy and biological aims.

Foundations of Quantum Theory, and Consciousness

Foundations of quantum mechanics (QM); Mind and QM; measurement problem in QM; consciousness in the cosmos; subjective and objective awareness; Foundational Principles for consciousness; complementarity, recursion and sufficient reason as foundational principles in the universe; physics and metaphysics; perennial monistic philosophical systems; science, spirituality and dialogue between different fields.

Professional Employment

Fletcher Jones Endowed Chair Professor of Computational Physics, Chapman University (CU)	September 2010-Present
Director, Center of Excellence in Earth Systems Modeling and Observations, CU	September 2012-February 2022
Director, institute for Earth, Computing, Human, and Observing (ECHO)	February 2022-Present
Founding Dean of the Schmid College of Science & Technology, CU	June 2009-August 2012
Vice Chancellor for Special Projects, CU	October 2008-August 2012
Director, Center for Earth Observing and Space Research (CEOSR), George Mason University (GMU)	1995-2008
Founding Dean, College of Science, George Mason University (GMU)	2006-2007
Dean, School of Computational Sciences (SCS), GMU	2002-2006
Associate Dean, SCS, GMU	2000-2002
Professor of Astrophysics (Invited), Department of Physics, University of Athens, Greece	1990-1992
Founding Director, CSI and Director for Academic Programs & Science, Institute for Computational Sciences and Informatics (CSI), GMU	1991-1994
Acting Chair, Department of Physics, GMU	1989 -1991
Professor, Dept. of Physics, GMU	1984-2008
Assistant/Associate Prof., Dept. of Physics, GMU	1975 -1984
Postdoctoral Research Associate, NASA/Goddard Space Flight Center, Greenbelt, MD	1973-1975
Postdoctoral Research Associate, Joint Institute for Laboratory Astrophysics, University of Colorado, Boulder, CO	1972-1973
Research Assistant, Department of Physics, M.I.T.	1967-1972

EDUCATION

Ph.D. Massachusetts Institute of Technology,
Physics, Prof. Philip Morrison, doctorate director,
Cambridge, MA, U.S.A., 1972

B.A. Cornell University,
Physics, Ithaca, NY, U.S.A., 1967

Large Projects, Programs, Grants and Services

Principal Investigator (PI), or Co-principal Investigator (Co-PI); and Co-Investigator (Co-I) on a total 55 astronomical observational programs:

- PI, Co-PI on 19 *International Ultraviolet Explorer (IUE)* observing projects.
- Co-PI on *Hubble Space Telescope* observations
- Co-PI on 3 *Very Large Array* (radio) observing projects.
- Co-PI on 2 radio and microwave astronomical observing projects
- Several observing projects as Co-I.

Grants with Chapman University

Classification and predictors analysis of heavy rain over Korean peninsula using dual-polarimetric radar and machine learning. funded by Korea Meteorological Administration, Co-I, Dr. Seung Hee Kim, PI.	\$97,000 2020-2022
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PI on the multi-year joint National Science Foundation. Department of Energy/US Department of Agriculture, Earth Science Modeling (EaSM) program, funded by the National Institute for Food and Agriculture (NIFA), on <i>Multi-Model Regional Simulation of Climate Change Impacts on Agriculture and Ecosystems in the Southwestern U.S.</i> This project was a joint grant with UCLA, Princeton University, and University of Miami and a joint initiative between USDA, DOE, and NSF. It used advanced computational modeling and data analysis to provide multi-model simulations of the impacts of climate change on agriculture and natural ecosystems in the southwestern U.S., and specifically Southern California. Kafatos and collaborators gave invited talks and papers at national and international meetings.	\$848,000 2011-2015
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FEDERAL AWARD IDENTIFICATION NO 80NSSC22K0215

12/01/2022-12/31/2024

The project's objective is to improve sea surface salinity (SSS) satellite products through improved radiative transfer model and sensor calibration. The retrieval algorithms for the Soil Moisture Active Passive (SMAP) and Aquarius missions will be assessed by comparison within situ salinity measurements and SSS from a numerical ocean general circulation model.

\$198,879.00 Incrementally Funded Amount \$198,879.00 Purchase Requisition: 4200784900

Fund: SCEX22021D Appropriation: 8021/220120	\$198,879.00
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Wildfire Project. The Jet Propulsion Laboratory and Chapman University joined forces to address the major problem of wildfires. Dr. Son Nghiem (JPL) PI and	\$95,696 2013
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Prof. Kafatos Co-PI. A one year project was funded by NASA's Applied Sciences Program. It was a pilot study to demonstrate the usefulness of satellite observations in assessing fire risks prior to fire season. Partners include the LA Co Fire Department (FD), Ventura Co, FD, Orange Co FA, JPL FD, NOAA National Weather Service, US Forest Service's Forest Fire Lab, NIC, etc. Significant results were obtained and media coverage from ABC, CBS, NBC news, and on Cal Fire News has focused on the project, a testament to the importance of the project results to fire authorities. Many fire agencies and stakeholders (like Sempra Energy whose high-voltage lines stretch across the California wilderness susceptible to wildfires) supported the efforts. At a meeting hosted by the CA DWR, the Western States Water Council, and the Western Governors' Association, a community request was expressed for the use of satellite products for wildfire danger assessment, to be considered as quantitative measure of drought impacts. The project was called *Enhancing Wildland Fire Decision Support and Warning Support*, jointly with Jet Propulsion Laboratory (JPL), the US Forest Service, the National Weather Service, and four country fire agencies as well as the JPL fire department

PI for the Institute for Global Change	\$120,000 2009-2011
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Cooperative agreement with Science Systems and Applications, Inc.,	\$120,000 2009-2011
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Top funded PI in federal sponsor expenditures at Chapman University for 2010-2011.

Grants and Cooperative Agreements at George Mason University

PI, NASA grant, <i>Global Environmental Change-hazards and regional impacts (GEC-hri)</i> ; Dr. William Lau, Head of the NASA Laboratory for Atmosphere, was Co-I on GEC-hri.	\$2,000,000 2006-2008
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PI, NSF grant, <i>Space Weather</i>	\$350,000 per year 2005-2008
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PI on 4 NASA Science Applications grants, <i>VAccess-Mid-Atlantic Geospatial Information Consortium (MAGIC)</i>	\$1,000,000 per year 2004-2008
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PI on multi-year Cooperative Agreement grant with NASA's Goddard Space Flight Center, <i>Joint Interdisciplinary Earth Science Information Center (JIESIC)</i>	\$3,500,000 to \$5,000,000 per year 1996-2008
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PI on Cooperative Agreement with the Naval Research Laboratory (NRL), <i>Computational Sciences, Space Sciences and Remote Sensing</i>	\$1,000,000 per year 1992-2008
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PI on NASA Earth Science Enterprise" Earth Science Information Partner" (ESIP) program, <i>Seasonal to Interannual ESIP(SI-ESIP)</i>	\$3,500,000 1997-2000
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PI on the EOSDIS Core System alternative architecture \$600,000
1994

PI on several prototype Earth Science Data Information System grants. Two of the above grants (JIESIC and GEC-hri) were related to Earth Observing, and specifically GEC-hri concerns itself with aerosol science, pollution and climate. Previous grants, MAGIC and SI-ESIP concentrated on applied and fundamental science, related to climate and various applications areas such as atmospheric pollution and hazards. SI-ESIP, MAGIC, JIESIC, NRL, and GEC-hri, all involved large interdisciplinary science teams and all were directed by the PI.

Overall, Kafatos has received more than 70 grants and contracts from a variety of sources including Office of Naval Research (ONR), NASA, National Science Foundation (NSF), and NRL. Director of the largest GMU research center, Center for Earth Observing and Space Research (CEOSR) - \$8,500,000 in expenditures in Fiscal Year (FY) 04, \$8,600,000 in FY05.

As PI he brought total funding in excess of \$40,000,000 to GMU just between 2000-2007. In over 18 years at GMU, he brought total funding in excess of \$52,000,000.

U.S. AND INTERNATIONAL MEMORANDA OF UNDERSTANDING/COLLABORATIONS

Research collaborations of his teams include a large number of universities and organizations worldwide. Recent significant Memoranda of Understanding (MOU) and collaborations include 30+ since 2000. Representative updates are listed here:

- Kyungpook National University, Daegu, South Korea, 2020
- State Key Laboratory of Remote Sensing Science, China Academy of Sciences, 2019
- Center for Applications of Spatial Information Technologies in Public Health at Institute of Remote Sensing and Digital Earth (RADI) under the Chinese Academy of Sciences (CAS) in China on research collaborations
- Ehwa Womans University Center for Climate/Environment Change Prediction Research, January 2019, Korea, for research and student exchange collaborations. Chapman and Ewha Universities agreed on student exchanges between the two centers. The MOU will provide opportunities to students to participate in state-of-the-art research as part of their studies. The students from each side can spend a month at the other institution and vice versa.
- Chiba University, 2019
- MOU between Dr. Menas Kafatos and Chairman Zin-ick Son L'BESTE USA, INC. on 'New Paradigm, Meditation'
- Kongju National University, at Chungcheongnam-do, July 2019, Korea
- Space Technology Application Center at Vietnam National Space Center (VNSC), National Institute of Oceanography, Vietnam Academy of Science and Technology (VAST), 2019
- In addition, in 2019 his teams collaborated or discussed collaborations with the University of Miami, Miami FL., George Mason University, Fairfax VA in USA, Korea University, Kyung Hee University, Seoul National University, and Chungnam National University in South Korea
- Institute of Geodynamics, National Observatory of Athens: Collaboration to set up 3 radon gamma ray sensors in western Peloponnese and 3 in Crete to monitor seismic activity, combined with seismometer sensor network & remote sensing Thermal Infrared Radiation observations, since 2018
- Center for Space and Remote Sensing Research at National Central University (NCU) in Taiwan, January 2016

- Institute of Earth Sciences, Academia Sinica (Chinese Academy) in Taiwan, January 2016
- Korea University, as International Scholar, March 2015, collaborations on climate change, agriculture and hazards
- Kyung Hee University, as International Scholar, 2013-2014
- Southeast European Virtual Climate Change Centre hosted by the Republic Hydrometeorological Service of Serbia, December 2013
- National Observatory of Athens, June 2013
- National Observatory of Athens, BEYOND Project in hazards and remote sensing
- Korea University, BK21+ELEC International Advisor on education
- Technical University of Crete: Collaboration on earthquake research
- MOU, Basilicata University, Italy
- University of Sheffield, UK
- The Schmidt Institute of Physics of the Earth of the Russian Academy of Sciences, Moscow, Russia
- Collaboration with The Institute of Geodynamics, National Observatory of Athens on earthquakes is continuing and expanding. Assisted in the Governor of Crete funding two radon detectors in Crete, to extend the existing network, west and south of Greece. The earthquake work is of direct relevance to California.
- Collaboration with the Jet Propulsion Laboratory (JPL) to lead efforts in wildfire research and mitigation.
- Work is continuing or in progress with several universities in Korea on wildfires, climate change and climate impacts on agriculture.

Scientific Collaborations with Individual Scientists

(partial list)

- Henry P. Stapp, Lawrence Berkeley Lab: quantum mechanics
- Dean Radin, Science Chief, IONS: experimental verifications of collapse of wave function
- Subhash Kak, Oklahoma State: quantum mechanics and consciousness
- Neil Theise, Mt Sinai: fundamental Awareness
- Sisir Roy, India, Goro Kato, Cal State University San Luis Obispo, et al.: Category Theory
- Deepak Chopra, Chopra Foundation: Consciousness and Monistic Schools
- Kanaris Tsinganos, Vasilis Karastathis, National Observatory of Greece: earthquake precursors
- Jeremy Pal, Loyola Marymount University: climate change
- Jay Kumar, Chapman University and Loyola Marymount University: Teaching consciousness, cosmology and quantum mechanics; and Monistic Schools
- Son Nghiem, JPL: wildfires
- Lee, Yungon, Chungnam National University, Korea.
- Scientists from the Space Technology Application Center at Vietnam National Space Center (VNSC), National Institute of Oceanography, Vietnam Academy of Science and Technology (VAST).

TEACHING

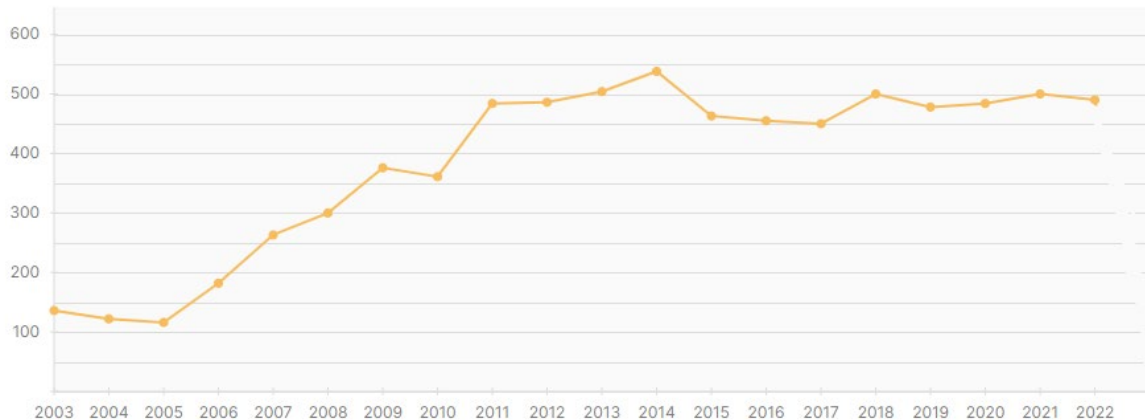
46 years of experience in undergraduate and graduate teaching, Masters & Doctoral levels, in a variety of fields at the *university* level at GMU and CU:

- Atomic physics and quantum calculations
- Astronomy and Astrophysics

- Mathematical physics
- High energy astrophysics
- Compact cosmic sources (quasars, black holes, neutron stars, white dwarfs)
- Relativity and cosmology
- Remote sensing and applications
- Earth system science
- Natural and anthropogenic hazards
- Climate change
- Computational sciences
- Computational physics and astrophysics
- Data information systems, data architectures
- Foundations of quantum theory
- The conscious universe
- Also taught a graduate astrophysics seminar, at the University of Maryland
- Taught for the Smithsonian Institution's "Resident Associate Program" (8 courses) on cosmology, history of science and foundations of quantum theory
- Taught a short course on Remote Sensing and Hazards, National Observatory of Greece (May 2007)
- *Distinguished International Scholar* lectures on Hazards and Climate Change, Korea University (beginning November-December, 2007; continuing several times over the years)
- Honors Course, Introduction to Computational Sciences (Fall 2010)
- Quantum Theory, Cosmology and Consciousness (Fall 2013, 2014, 2016, 2018) Department of Religious Studies, Chapman Univ., co-taught with Dr. Jay Kumar - [Link](#)
- Hazards Global Environmental Change (HGEC) 697 Special Project (four times)
- HGEC 699 MS Thesis (Several times)
- Led the development of several new degree programs in *Computational Sciences and Informatics*, *Astrophysics and Cosmology*, *Earth Observing and Global Change*, and *Quantum Information Science*. He himself has developed a host of new courses in applied physics, astrophysics, cosmology, Earth system science, remote sensing, climate change, foundations of quantum theory, philosophy and philosophy and science.

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Total publications, of 349 include refereed journal articles, book chapters, refereed published proceedings (partial) and 23 books. Total Citations: 9.821 + (Research Gate). Average citations per



work 22.32 (for 173 publications). Highest Citation of single article: 500 (from *all* database sources). In the last several years, he has been publishing at the rate of 4-7 papers per year (see below). **h-index: 52** (very high) **Research Gate score: 43.17**

Citations Per Year in professional journals, proceedings, and book chapters (total numbers shown here from Research Gate, 2022)

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3. **Kafatos, M.**, Tucker, W.H. (1972) Time-Dependent ionization equilibrium and Line Radiation Under Flarelike Conditions, *Astrophysical Journal*, 175:827-841
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335. Jia, S., Kim, S.H., Nghiem, S.V., **Kafatos, M.C.** (2019) Estimating Live Fuel Moisture Using SMAP L-Band Radiometer Soil Moisture for Southern California, USA. *Remote Sens*, 11(13), 1575, <https://doi.org/10.3390/rs11131575>
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339. Ouzounov D., Pulinets, S., Sun, K., Shen, X., **Kafatos, M.C.** (2020) Atmosphere Response to Pre-Earthquake Processes Revealed by Satellite and Ground Observations. Case Study for Xinjiang, China (2008-2014), *Annals of Geophysics*, 63, <https://doi.org/10.4401/ag-8080>
340. Kim, M., Kim, S.H., Kim, W.V., Lee, Y.G., Kim, J., and **Kafatos, M.C.** (2021) Assessment of Aerosol Optical Depth Under Background and Polluted Conditions Using AERONET and VIIRS Datasets. *Atmos. Environ.* 245, 117994, <https://doi.org/10.1016/j.atmosenv.2020.117994>
341. Fujioka F.M., Weise, D.R., Chen, S-C., Kim S.H., **Kafatos, M.C.** (2021) Reaction Intensity Partitioning: A New Perspective of Fire Danger. *International Journal of Wildland Fire*, 30, 351-364
342. Ouzounov D., Pulinets S., Davidenko D., Rozhnoi A., Solovieva M., Fedun V., Dwivedi B.N., Rybin A., **Kafatos, M.C.** and Taylor P (2021) Transient Effects in Atmosphere and Ionosphere Preceding the 2015 M7.8 and M7.3 Gorkha–Nepal Earthquakes. *Front. Earth Sci.* 9:757358.doi: 10.3389/feart.2021.757358
343. Karastathis V.K., Eleftheriou G., **Kafatos M.C.**, Tsinganos K., Tselentis G. A., Mouzakiotis E. and Ouzounov D. (2022) Observations on the Stress Related Variations of Soil Radon Concentration in the Gulf of Corinth, Greece. *Scientific Reports*, 12(1), p.5442 *nature.com*.
344. Jia, S., Nghiem, S.V., Kim, S.H., Krauser, L., Gaughan, A.E., Stevens, F.R., **Kafatos, M.C.**, Ngo, K.D. (2022). Extreme Development of Dragon Fruit Agriculture with Nighttime Lighting in Southern Vietnam. In: Vadrevu, K.P., Le Toan, T., Ray, S.S., Justice, C. (eds) *Remote Sensing of Agriculture and Land Cover/Land Use Changes in South and Southeast Asian Countries*. Springer, Cham.
345. [Sarafoglou, N., Kafatos, M.C., Beall, J.H. \(2022\) Simultaneity in the Scientific Enterprise, *Advances in Social Sciences Research Journal*, 9\(4\).25-43. <https://doi.org/10.14738/assrj.94.12113>](https://doi.org/10.14738/assrj.94.12113)
346. Yang, K-H.S., **Kafatos M.C.** (2022) The Role of the Exalted Mind in the Observer Observed Quantum Reality. *European Society of Medicine. Medical Research Archives*, 10(6). <https://doi.org/10.18103/mra.v10i6.2865>
347. Kak, S., **Kafatos M.C.** (2022) Black Holes, Disk Structures & Cosmological Implications in e-Dimensional Space. *Physics Essays*, 35(4). (December 2022).

348. Wang, Y. (V.), Kim, S.H., Lyu, G., Lee, C.L., Lee, G., Min, K.H., **Kafatos M.C.** (2023) Relative Importance of Radar Variables for Nowcasting Heavy Rainfall: A Machine Learning Approach, *IEEE Transactions on Geoscience and Remote Sensing (TGRS)* 61, 1-14, 4100314
349. Yi Victor Wang, Seung Hee Kim, Menas C. Kafatos, Verifying empirical predictive modeling of societal vulnerability to hazardous events: A Monte Carlo experimental approach, *Reliability Engineering & System Safety*, Volume 240, 2023, <https://www.sciencedirect.com/science/article/pii/S0951832023005070>

Books and Monographs

1. Kafatos, M. (1984) ***Astronomy Laboratory Manual***, Kendall Hunt Pub Co.
2. Kafatos, M., Harrington, R.S., Maran, S.P. (ed.) (1986) ***Astrophysics of Brown Dwarfs***, Cambridge University Press, ISBN: 978-0521323376
3. Kafatos, M., (ed.) (1988) ***Supermassive Black Holes***, Cambridge University Press, ISBN: 978-0521342469
4. Kafatos, M., (ed.) (1987) ***1987A Supernova in the Large Magellanic Cloud***, Cambridge University Press
5. Kafatos, M. (ed.) (1989) ***Bell's Theorem, Quantum Theory and Conceptions of the Universe (Fundamental Theories of Physics)***, Springer, ISBN: 978-9048140589
6. Kafatos, M., and Kafatou, T. (1991) ***Looking In, Seeing Out: Consciousness and Cosmos***, Quest Books, ISBN: 978-0835606745
7. Trefil, J., Kafatos, M. (1992) ***Introduction to Astronomy***, McGraw-Hill Inc., Vol. 2.
8. Kafatos, M. and Y. Kondo (ed.) (1996) ***Examining the Big Bang and Diffuse Background Radiations***, Kluwer, Dordrecht
9. Nadeau, R. and M. Kafatos, ***The Non-local Universe: The New Physics and Matters of the Mind***, Oxford, Oxford University Press (1999), ISBN: 978-0195144086. (many citations)—translated in German, Dutch, etc.
10. Kafatos, M. and R. Nadeau, ***The Conscious Universe: Parts and Wholes in Physical Reality***, New York, Springer-Verlag (2000), ISBN: 978-0387988658. (many citations)—translated in German, Dutch. etc.
11. Kerschberg, L. and M. Kafatos (ed.), ***Thirteenth International Conference on Scientific and Statistical database Management***, Los Alamitos, CA, IEEE Computer Society (2001), ISBN: 0-7695-1218-6.
12. Kafatos, M., and Draganescu, M. (ed.), ***Principles of Integrative Science***, Bucharest, Technical Publishing House, (2003), ISBN: 973-31-2199-1.
13. Zhou, G., Baysal, O., Kafatos, M., and Yang, R. (ed.) ***Real-time Information Technology for Future Intelligent Earth Observing Satellites***, Hierophantes: Pottstown, Pennsylvania, (2003), ISBN: 0-9727940-0-X.
14. Qu, J.J., Gao, W., Kafatos, M., Murphy, R.E., Salomonson, V.V. (ed.) ***Earth Science Satellite Remote Sensing: Science and Instruments Vol. I, & Data, Computational Processing, and Tools, Vol. II***, Beijing, Tsinghua Univ. Press, Berlin, Springer-Verlag, (2006), ISBN: 3-540-35606-1, 3-540-35630-4(Springer), 7-302-12844-8, 7-302-12855-3(Tsinghua)—translated in Chinese
15. Chopra, D., Penrose, R., Kragh, H., Kafatos, M., King, C., Joseph, R., Mensky, M., Clarke, C. (2011) ***Cosmology of Consciousness: Quantum Physics & Neuroscience of the Mind***, Cosmology Science Publishers, ISBN: 978-0970073358.

16. Kafatos, M. C., Chopra, D. (2014) ***The Time Machine of Consciousness, Cosmology of Time, Quantum Physics of Time Travel (Guest Editors)***, *Cosmology*, Vol. 18
17. Kafatos, M.C. (2016) ***Living the Living Presence*** (in Korean) Miruksa Press: Seoul, Korea
18. Chopra, D., Kafatos, M.C. (2017) ***You Are the Universe*** Harmony, Random House: New York. NYT Bestseller
19. Kafatos, M.C. (2017) ***Living the Living Presence (Βιώνοντας την Ζωντανή Παρουσία***, in Greek) Μέλισσα Publishers, Athens.
20. Chopra, D., Kafatos, M.C., (2018) ***You Are the Universe (Είσαι το Σύμπαν***, in Greek), P. Asimakis Publishers.
21. Kafatos, M.C. (2019) ***Science, reality & everyday life (Επιστήμη, Πραγματικότητα & Καθημερινή Ζωή***, in Greek), P. Asimakis Publishers.
22. Kafatos, M.C. (2020) ***Science, reality & everyday life***, P. Asimakis Publishers.
23. Chopra, D., Kafatos, M.C., (2023) ***You Are the Universe***, in Korean, Kim Young Sa Publishers.

COLLABORATORS AND CO-EDITORS (PARTIAL LIST)

A. Narasimhan (CIIS); D. Banerji (CIIS); D. Chopra (UC San Diego); D. Ouzounov (Chapman Univ., CU); P. Taylor (NASA GSFC); J. Shukla (GMU); N. Bryant (JPL/Caltech); Y. Liu (National Central Univ., Taiwan); S. Pulnits (Research Space Institute, Russia); M. Parrot (Univ. d'Orleans, France); K. Hattori (Chiba Univ., Japan); V. Tramtoli (Basilicata Univ., Italy); H. Kontoes, (National Observatory Athens, NOA); G. Papadopoulos (NOA); V. Karastathis (NOA); K. Tsinganos (U. Athens); A. De Santis (INGV, Italy); M. Hayakawa (Chofu Univ., Japan); R. Singh, H. El-Askary, & S.H. Kim, (CU); B. Myoung, (APEC); W.K. Lee (Korea Univ.); S.K. Park (Ewha Womans Univ.); J. Kim (UCLA); S. Nghiem (JPL/Caltech); H.P. Stapp (Lawrence Berkeley Lab); D. Radin, (Science Chief, IONS); S. Kak, (Oklahoma State); N. Theise, (NYU); S. Roy, (India); G. Kato, (Cal State Univ. San Luis Obispo); Eric Strauss, J. Pal, (Loyola Marymount Univ.); J. Kumar, (CU & Loyola Marymount Univ.); Lee, Y., (Chungnam Nat. Univ., Korea); Jang, E., (Kongju National Univ. Korea); Scientists from Center at Vietnam National Space Center (VNSC), National Inst. Oceanography, Vietnam Academy of Science and Technology (VAST).

GRADUATE AND PH.D. THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

Has directed 15 doctoral dissertations, including: Bradley L. Graham, 1994 (industry); Elios Ramos-Colon, 1997 (Faculty at Univ. of Puerto Rico); Zuotao Li, 1998 (federal gov't); Le Yi Yang, 2000 (industry); Chai Lim, 2003 (federal gov't); Hesham el-Askary, 2004 (faculty at Chapman Univ.); Sudipta Sarkar, 2004 (industry); Guido Cervone, 2004 (faculty at PSU); Daniel Owunwanne, 2005 (faculty at Howard Univ.); Foudan Salem, 2005 (instructor); Amin Jazaeri, 2007 (Berkeley, CA); John Huth, 2007 (industry); Alok K. Sahoo, 2008 (postdoctoral fellow, Princeton); Ritesh Gautam, 2008 (Faculty, India); Kristen Whitney, 2018 (CEESMO). Directed the following postdoctoral fellows at GMU: Ruixin Yang (computational fluid dynamics, currently faculty at GMU); Michael Maisack (astrophysics); Xinhua Deng (Earth science metadata); Kwang Su-Yang (data mining); Chaowei Phil Yang (data information systems, currently faculty at GMU); at Chapman University: Anup K. Prasad (faculty in India, for air pollution/transport); Shenyue Jia (wildfires); Victor Wang (data mining) Directed several M.S. theses.

ORGANIZATION OF INTERNATIONAL EVENTS, WORKSHOPS & CONFERENCES - (PARTIAL LIST)

Kafatos has developed and developing programs at every level, working with industry and other stakeholders, linking practical applications with fundamental knowledge and scholarship; at Chapman Univ. as Dean he developed the *Technology Group*, working with industry and academia.

1. Chairman Organizing Committee *Copenhagen Interpretation and Consequences* at Chapman in October 2019, co-sponsored with the President of Chapman University, Dr. Daniele Struppa, the California Institute of Integral Studies and Loyola Marymount University.
2. Assisted in organization for a joint lecture with Master SuBul Sunim, Korea, 2017. Joint discussions for the Korean Seon Buddhist TV, July 2020 and February 2021.
3. Since 2013, involvement in organizing special sessions for annual American Geophysical Union winter meeting. Sessions include earthquakes, wildfires and climate effects on agriculture.
4. Co-Chair, *The Great Tohoku Earthquake of 2011: Lessons Learned for California*, (Chapman University, 19 March, 2012)
5. Co-Chair, *The Power of Cloud: Driving Innovation for your Business*, (Chapman University, and Ingram Micro, 28 Nov., 2011)
6. Chair, *Energy, Economy & the Environment*, (Chapman University, April, 2011)
7. Chair, *Nature of Reality*, Deepak Chopra, Michael Shermer, Menas Kafatos, and other panelists (Chapman University, March, 2011)
8. Co-chair, *Beyond Copenhagen*, (Chapman University, April, 2010)
9. Chair, Science Steering Committee, *From Deserts to Monsoons* (Crete, June 2008).
10. Member of Science Steering Committee, *Sand and Dust Storm International Project* (WMO-sponsored, Beijing China, and Barcelona, Spain, 2005, and 2007).
11. *EastFIRE Conference*, Chair, Steering Committee, (Fairfax, VA, May 2005).
12. Chair of Steering Committee & General Chair, *Future Intelligent Earth Observing Satellites (FIEOS)*, Commission-I, ISPRS (Denver, November, 2002).
13. Conference Chair, *Scientific & Statistical Database Management* meeting, (George Mason University, 18-20 July, 2001).
14. Co-Chair, *Fundamental Principles of Cosmology: The Foundations for a Conscious Universe*, (GMU Symposium, Oct. 1999).
15. Co-Chair, SOC, *International Astronomical Union (IAU) Symposium 168 "Examining the Big Bang"*, (Hague, 1996).

INVITED LECTURES AT CONFERENCES, EVENTS, AND INVITED SEMINARS (2005- PRESENT)

1. Yellow River Conservation Commission (YRCC) Zhengzhou (2005)
2. Chinese Forest Science Academy (2005, 2006)
3. National Satellite Meteorological Center/Chinese Meteorological Administration (NSMC) (2005)
4. Institute for Remote Sensing (2005, 2006)
5. Wuhan University (November 2006)
6. *The Gaia Theory*, Conference, Arlington, Virginia (14 October, 2006)
7. *Quantum Mechanical non-Locality*, Dept. of Commerce (18 October, 2006)
8. *Tropical Cyclones and Aerosols*, American Geophysical Union (AGU) (winter meeting, 2006)
9. *Non-parametric tests for quasar data and Hubble Diagram*, Erice, Italy (April 2007)
10. *Consciousness, Quantum Theory and Brain Dynamics*, Univ. of Salzburg (July 2007)
11. *Climate Change and Hazards*, Korea University (November 2007)
12. *Climate Change and Hazards*, Seoul National University (December, 2007)

13. *Dust Storms and Aerosols*, Korean Meteorological Administration (December 2007)
14. *Climate Change and Hazards*, Bowen Center for the Study of the Family (January 2008)
15. *Climate Change, Hazards, and Regional Effects in Greece*, Embassy of Greece (February 2008)
16. Panel member at Nature of Reality Roundtable, New York, NY, Philoctetes Center, (January 2011)
17. *The Physics of Consciousness - Sages and Scientists: The Merging of a New Future*, (February 2011)
18. *Consciousness and The Universe: Non-local, Entangled, Probabilistic and Complementary Reality at Toward A Science of Consciousness 2011* (May 2011)
19. *Toward a Science of Consciousness, Consciousness and the Universe: Non-local, Entangled, Probabilistic and Complementary Reality. (TSC) Stockholm, Sweden, (May 2011)*
20. *Climate Impacts at Regional Scales, Hazards and Adaptation Strategies* at the Institute for Space Applications & Remote Sensing (ISARS) of the National Observatory of Athens (NOA), Greece (July 2011)
21. *Invited lecture at Science and Non-Duality (SAND) 2011*, San Rafael, CA, October 19-24, 2011, organized by Neti Neti Media. Lecture was entitled "Underlying Principles in Quantum Theory and Metaphysics and the Role of Consciousness in the Universe"
22. *Sages and Scientists: The Merging of a New Future*, March 3-5, 2012 - organized by the Chopra Foundation - Kafatos presented a lecture on "The Riddle of Consciousness"
23. *Invited participant in panel discussion; and Forum on Eastern Philosophy & Consciousness, at the Towards a Science of Consciousness conference*, April 9 and 10, 2012, Tucson, AZ
24. *Seminar in the School of Engineering*, Ewha Womans University, April 17, Seoul, Korea
25. *Seminar in the School of Biosciences*, Korea University, April 18, Seoul, Korea
26. *Public lecture on urban agriculture*, Korean Craft Design Foundation (KCDF), April 19, 2012, Seoul, Korea
27. *Invited lecture at Science and Non-Duality (SAND) Europe 2012*, Doorn, The Netherlands, May 29-June 3, 2012. Lecture was entitled "Consciousness, Self and Science"
28. *Seminar, National Observatory of Athens (NOA)*, June 6, 2012. *Regional Climate Modeling and Observations with Applications to Agriculture*
29. *Seminar, Department of Physics, University of Athens*, June 8, 2012, *ibid.*
30. *Public lecture organized by the Bank of Greece, series EMEKA*, June 13, 2012, *ibid.*
31. *2nd International Workshop on CORDEX-East Asia, Climate Change, Hazards and Regional Impacts*, November 2012
32. *American Geophysical Union (AGU) Annual Meeting: Climate change impacts utilizing regional models for agriculture, hydrology and natural ecosystems*, Dec. 5, 2012
33. *Keynote Address, The Problem of Consciousness in Modern Science: Does Quantum Theory Have Something to Say? JSPS, Third Multidisciplinary Forum*, February 1, 2013
34. *Toward a Science of Consciousness: Dayalbagh Educational Institution, Agra, India*, March 5, 2013 (TSC)
35. *Kafatos M, (2010) Climate Change, Facts and Hype: Hazards and Impacts and What Does the Future Hold? Presented at the Economic Science Institute, Chapman University, April 16, 2010*
36. *Participated as invited panelist in Korean Green Foundation's official panel during the Copenhagen UN Conference*, December, 2009
37. *Speaker, Ewha Womans University Pyungyang Winter School and Seminar* (January 12-14, 2010)
38. *Keynote speaker, Symposium, KACCC (Korea Adaptation Center for Climate Change) Symposium*, November 2009
39. *Special presentation to Greek Embassy Climate Change, facts and Hype: Hazards and Impacts and What does the Future Hold? (2011)*

40. Opening remarks, Korean Women in Science and Engineering (KWise) Annual Meeting, October 20, 2012, Chapman University.
41. Invited plenary talk at *Science and Non-Duality (SAND)* 2012, San Rafael, CA, October 25, 2012, organized by Neti Neti Media. Talk was titled "Fullness in Emptiness: From the Quantum Vacuum to the Infinite Self."
42. Invited workshop at *Science and Non-Duality (SAND)* 2012, San Rafael, CA, October 24, 2012, organized by Neti Neti Media. Workshop was titled "It is All in the Emptiness: From the Quantum Vacuum to the Infinite Self."
43. Invited workshop at *Science and Non-Duality (SAND)* 2012, San Rafael, CA, October 24, 2012, organized by Neti Neti Media. Workshop was given jointly with Rupert Spira and was titled "Ever-Changing, Never-Changing Knowledge."
44. Invited talk at 2nd International Workshop on CORDEX-East Asia, 6-8 November 2012, Jeju KAL Hotel, Jeju, Korea. Talk was titled "Climate Change, Hazards and Regional Impacts: Focus on Agriculture and Ecosystems."
45. Several invited seminars on climate change and natural hazards in the School of Biosciences, Korea University; and School of Engineering, Ewha Womans University, Seoul Korea, November 9-30, 2013.
46. Invited talk at the American Geophysical Union, San Francisco, December 3-6, 2012, on "Regional Climate Impacts on Agriculture."
47. Invited talk at EWACC2012 Building Bridges, sponsored by Cyprus Institute, Nicosia, Cyprus, December 10-14, 2013, titled "Climate Change and Regional Impacts on Agriculture and Ecosystems in Semi-arid Regions."
48. Invited public lecture at JSPS Alumni Forum, Chapman University, February 8, 2013, titled "The Problem of Consciousness in Modern Science: Does Quantum Theory have something to say?"
49. Invited workshop at Towards Science of Consciousness 2013, Dayalbagh Educational Institute, Dayalbagh, Agra, India, March 2-9, 2013, titled "The Self in Science and Indian Monistic Schools", given on March 5.
50. Invited plenary lecture at Towards Science of Consciousness 2013, Dayalbagh Educational Institute, Dayalbagh, Agra, India, March 2-9, 2013, titled "The Mystery of the Self", March 7.
51. Invited public lectures at Pneuma Touch conference, March 10-12, 2013. Chosun Westin Hotel, March 11. Kyung Hee University, March 12. Large attendance by politicians, artists, academics, students, media and the general public (see articles and media below).
52. Opening remarks, Interface conference, Chapman University, April 4, 2013.
53. Invited workshop at *Science and Non-Duality (SAND)* Europe 2012, Science and Mystery of Perception, Doorn, The Netherlands, May 29-June 2, 2013. Workshop was titled "Perception, Science and the Self", given May 30, 2013.
54. Invited plenary talk at *Science and Non-Duality (SAND)* Europe 2012, Science and Mystery of Perception, Doorn, The Netherlands, May 29-June 2, 2013. Talk was titled "Perception and the Self: Mystery and Amazement", given May 31, 2013.
55. Seminar, National Observatory of Athens (NOA), June 4, 2013. Topics were Regional Climate Modeling and Wildfires.
56. Attended workshop Impacts of climate change on forest fires and forest ecosystems, National Observatory of Athens (NOA), June 4, 2013. Also, BEYOND EC project (FP7-REGPOT-2012-2013) fire project meeting.
57. Scientific discussion, Department of Physics, University of Athens, June 18, 2013.
58. Presented at CA DWR, Western States Water Council, and Western Governors' Association on satellite data usage for wildfire mitigation (with Son Nghiem, JPL), San Diego, August 6, 2013.

59. Korean Scientists Association, National Meeting, NYC 8-11 August, 2013.
60. *Sages and Scientists 2013: The Merging of a New Future*, La Costa, Carlsbad, CA, August 16-18, 2013. Invited plenary "The Amazing Vision: The Conscious Universe." Also participated in panel with several other scientists.
61. *Science and Non-Duality (SAND) 2013*, San Jose, CA, 24-27 October 25, 2013, organized by Neti Neti Media. Invited Plenary "Observer-based Science."
62. *Science and Non-Duality (SAND) 2013*, San Jose, CA, October 24, 2012, organized by Neti Neti Media. Invited workshop "Perception, Science and the Self."
63. International Conference on Regional Climate - CORDEX 2013, Brussels, Belgium, 4-7 November, 2013. "Climate Change, Hazards and Regional Impacts: Agriculture."
64. Program Management Board meeting, BEYOND Project, Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing, National Observatory of Athens (NOA), 19 November, 2013; and invited talk "New Techniques for Wildfire Risk Analysis."
65. Physics Department, University of Athens, 14-15 November, 2013. Invited workshop.
66. Extended invitation as International Scholar, Kyung Hee University, Seoul, Korea in presenting lectures and leading collaboration, 30 December 2013-17 January, 2014.
67. *The 15 Minutes that Changes the World*, EBS TV Show, 6 January, 2014.
68. EaSM P.I. Meeting, USDA Conference and Training Center, Patriot Plaza III, Washington, DC, 26-30 January, 2014. P.I. Report.
69. Loyola Marymount University, 5 February, 2014. Invited lecture "Quantum Theory, Cosmology and Ecology: Consciousness Uniting All."
70. *Frontiers of Consciousness*, Organized by the Samueli Institute and the Faggin Foundation, National Academy of Sciences, Beckman Center, Irvine, CA 4-5 March 2014. Invited talk "Physics and Consciousness."
71. *Collaborative Centers for Consciousness and Healing (CCCH) Planning Meeting*, Rancho Santa Fe, CA, 5 April, 2014.
72. *Seduction of the Spirit*, La Costa, Carlsbad, CA, 10-12 April, 2014. Invited panel.
73. *Towards Science of Consciousness*, Tucson, AZ, 21-23 April, 2014. "Qualia and the Mathematics of Consciousness."
74. LMU, 24 April, 2014. Invited campus lecture *Presenting a special trans-disciplinary lecture and conversation...* "Science, Spirituality and the Future of Humanity."
75. EaSM NSF Review, 27-30 April, 2014.
76. Society for Consciousness Studies, Conference <http://consciousnessconference.org/>, San Francisco, 29-31 May, 2014. Invited plenary "Consciousness and Non-locality in Contemporary Physics."
77. *Space Security Conference*, General Secretariat for Research and Technology, National Observatory of Athens, University of Athens, Hellenic Ministry of National Defense, EU Commission, Officers' Club "Sarogleion", Athens, 19-20 June, 2014. Invited plenary "Space and Ground Observations for Earthquake Monitoring."
78. Institute for Geodynamics, National Observatory of Athens, 1 July, 2014. Invited lecture "Earthquake Forecasting: A Challenge and Opportunity for Interdisciplinary Science."
79. Korea University, Div. of Environ. Sci. & Eco. Eng., 21 July, 2014. Invited lectures on wildfires and climate change.
80. Kyung Hee University, Acupuncture & Meridian Science Research Center, 24 July, 2014. "The Rhythm of Life: Science, Philosophy and Human Well-Being."

81. *International Workshop on Earthquake Preparation Process 2014 - Observation, Validation, Modeling, Forecasting*, 2 August, 2014, Hokkaido University, Sapporo Japan. Invited talk “Space and ground observations for earthquake monitoring.”
82. Graduate School of Science, Chiba University, 5 August, 2014. “The Interdisciplinary Science of EQ Predictability.”
83. *Sages and Scientists 2014: The Merging of a New Future*, La Costa, Carlsbad, CA, 22-24 August, 2014. Invited panel “Non-dual Conscious Reality: The I Am non-dual levels.” Also participating in a second panel with several other scientists.
84. Fish Interfaith Center, Chapman University with Jay Kumar, “Seeking the Sacred in Science” http://prezi.com/62pvvm6dfd7c/?utm_campaign=share&utm_medium=copy&rc=ex0share
85. *Biofield Meeting - Interdisciplinary Lead Biofield Physics- White Papers & what do we do next?* Pacific Pearl Center, La Jolla, CA, 12-14 September, 2014.
86. *The World Knowledge Forum*, Seoul, Korea, 14-16 October, 2014. Invited Panel discussion, “Happiness Gurus.”
87. *Science and Non-Duality (SAND) 2014*, San Jose, CA, 22-28 October 2014, organized by Neti Neti Media. Invited Plenary Talk: “The Nonlocal, Entangled, Conscious Universe: From the Spookiness of Limited Mind to the Undivided Wholeness of Reality.”
88. *Science and Non-Duality (SAND) 2014*. Panel: “Scientific Views and Meaning of Entanglement” with Henry Stapp, Federico Faggin, Neil Theise, Rudolph Tanzi. Entanglement has a well-understood meaning in quantum mechanics. However, as any term, this very important concept has different interpretations and meanings, even among scientists. In this panel of scientists, the panelists briefly discussed their own understanding and attempt to identify a meaning very relevant in each panelists view to life.
89. *Science and Non-Duality (SAND) 2014*. Workshop: “Nature and Experience of Consciousness in Shaivism and Relationship to Modern Science.”
90. iQmetrix, Inc., Vancouver, BC, 22-23 January, 2015. Invited Presentations: “The Quantum Corporation: Making Sense of What Drives Groups and Individuals.”
91. *Esalen, The Sutras of Science*, Esalen, CA, 1-6 February, 2015. Invited Workshops: “Opening the Door to Fundamental Reality: Quantum, Universe and Consciousness”; and, “Undivided Wholeness in Advaita vedānta and Kashmir śaivism: Sublime Sūtras.”
92. Laguna Beach, CA, 8 February, 2015. Workshop: “The Quantum in Your Life: Making Sense of What Drives Us and the Universe.”
93. *Institute of Noetic Sciences (IONS), The Role of Consciousness in the Physical World*, Petaluma, CA, 4-7 March, 2015. “Mathematics of Consciousness.”
94. *Loyola Marymount University* 12 March 2015. “How Do I Know That I Know?: Consciousness, Theology, and Science”
95. Shivananda Ashram Yoga Center, Paradise Island, Nassau, Bahamas 2-4 May, 2015. Workshop on science and spirituality: “Nature and Experience of Fundamental Consciousness.”
96. *Neuroscience School of Advanced Studies (NSAS) Neuroepigenetics*, Villa Finaly, Florence, Italy, 17-22 May, 2015. Summer School. <http://www.nsas.it/neuroepigenetics>
97. *Science and Non-Duality (SAND) Exploring the Nature of Consciousness*, Titignano and Rome, Italy, 24-30 May, 2015. “Undivided Wholeness and Natural Laws.”
98. “Dialogue between Quantum Mechanics and Korean Art” with Prof. Byungmo, Jung, Korean Art, Seoul, Korea. 2016
99. *Sivananda Ashram Yoga Retreat: Deepak Chopra and Menas C. Kafatos, You Are the Universe* (Symposium, Workshops and Book Signing), Paradise Island, Bahamas, February 3-5, 2017.

100. *Sivananda Ashram Yoga Retreat*: Sally Kempton: “Chakras and Tantra: The Goddess.” Swami Brahmananda: “Advaita Vedanta.” Menas C. Kafatos: *Kashmir Saivism*. Debashish Banerjee: “Sri Aurobindo.” *The Nature of Reality: Advaita Vedanta, Kashmir Shaivism, the Goddess, Sri Aurobindo* (Symposium, Workshops, coordinated by Menas Kafatos), Paradise Island, Bahamas, February 17-21, 2017.
101. *UCLA Lifespan Learning Institute & Longevity Center: Mind, Consciousness and The Social Brain: Transformation Through The Lifespan*: Dan Siegel, Deepak Chopra, Rudy Tanzi, Marion Solomon. *Living the Living Presence*, Semel Institute, UCLA, CA, USA, March 19, 2017.
102. *Neuroscience & Leadership Summit*: 4th Annual Meeting, *Modern Science*, Chapman University, Orange, CA, USA, March 24, 2017.
103. *Anastamos Journal*, (interdisciplinary journal in humanities): *Living the Living Presence is the Antidote to Fear*, Chapman University, Orange, CA, USA, April 19, 2017.
104. *Safe Athens, 2017: Interdisciplinary Science for Hazards: The Nexus of Theory and Societal Applications*, Athens, Greece, June 28, 2017.
105. *Symi 18th Symposium: Cyber Challenges for Peace, Democracy, Communication*, Isolation despite Interconnectivity, Elounda, Crete, Greece, July 2-6, 2017.
106. *National Hellenic Society, Heritage Weekend and Classic, The Quantum Universe and Reality*. Las Vegas, NV, USA, October 5-8, 2017.
107. *The 18th World Knowledge Forum Inflection Point: Towards New Prosperity*, Natural Laws in the Quantum Universe, in *The Promises and Perils of AI* panel, Shilla Hotel, Seoul, ROK, October 17-19, 2017.
108. International Conference on Quanta and Mind (ICQM2018) at the J. Paul Leonard Library, San Francisco State University, 1600 Holloway Ave., San Francisco, California, from April 10-11, 2018.
109. Invited Keynote Address and Award at the Traditional Chinese Medicine World Foundation, October 11-14, 2018, Reston, VA.
110. Participation in talks with musicians in Seoul Korea. Organized and participated as a moderator in a talk concert “Look Inside and Create Your Reality” at MIRAEIN Co. in Seoul Korea. The whole event was filmed and aired in a national cable television in South Korea (Channel 625)
111. Participation in a Korean national television documentary. Was filmed in an Educational Broadcasting System (EBS) human documentary in South Korea, on a prime documentary called ‘Skills for Relaxing’ for 2 days in January 2019. It was aired on the EBS for two days, 1 hour each day, at EBS (Korean national television) in June 2019.
<http://www.mediaus.co.kr/news/articleView.html?idxno=154617>
112. Keynote speaker and participated in conference, The Korea times, Daily Newspaper in Los Angeles, 29th anniversary conference of Hanmi Family Counseling Center (HFCC),
<http://www.koreatimes.com/article/20190506/1246078>
113. Was filmed for a prime documentary, ‘Skills for Relaxing’ in January 2019, which was aired for 2 hours in June 2019 at EBS. Korea Educational Broadcasting System (EBS) is a South Korean educational television and radio network covering South Korean territory, and the only major South Korean radio and television network without a separate regional service. Established as KBS 3, Seoul Animation Center and KBS Educational Radio in the 1980s, and became an independent corporation in 1990. EBS strives to supplement school education and promote lifelong education for everyone in Korea. The main counterparts of this network are PBS in the United States, as well as CBBC, BBC Two and BBC Four in the UK.
<http://www.mediaus.co.kr/news/articleView.html?idxno=154617>
114. Visited Chungnam National University in January 2019 and presented invited talk “Researches at the Center of Excellence in Earth System Modeling.”

115. Special lecture/concert with musician group QURENCIA on “Look Inside and Create Your Reality” at MIRAEIN Co., Ltd. in Seoul Korea, which was aired in a national cable television station in South Korea (Channel 625)
116. Invited as a panelist at SYMI Symposium organized by former prime minister of Greece, George Papandreou, in July 2019, in Crete, Greece for presentation to young participants.
117. Participated in the 29th anniversary conference of Hanmi Family Counseling Center (HFCC) in Orange County <http://www.koreatimes.com/article/20190506/1246078>
118. Meeting with faculty and graduate students, with invited talk both June and August 2019 at Remote Sensing and GIS Center in College of Science, Korea University.
119. Invited Lecture to the 9th International Symposium on Diagnosis of Environmental Health by Remote Sensing (DEHRS) and The Workshop of DEHRS on The Belt & Road (WDEHRS on B&R) in Zhengzhou, China
120. Participation and/or presentations at the Sivananda Ashram in The Bahamas, February and June 2019.
121. Society for Consciousness Studies Conference at Yale Divinity School, May 31-June 2, 2019 <https://consc.org/scsconference2019>
122. Several book signings, seminars, radio and TV interviews in Crete and Athens, Greece in September 2018, March and July 2019.
123. Theatron of the Americas. On the occasion of Greece’s 200 years of Independence, Theatron of the Americas honored the country in which theater was born by inviting actors and distinguished guests from the US, Greece and around the world to read passages from Ancient Greek drama and poetry. The online event took place on Wednesday, March 24, 2021 at 10:30 am PST, via Facebook Live (<https://www.facebook.com/socrates.alafouzoz>) and Zoom. The event was hosted by Socrates Alafouzoz, Founder of Theatron of the Americas, and supported by the Consulates General of Greece in Los Angeles, New York and Chicago. For more information about the event’s program: <https://www.theatronoftheamericas.com/events>. Kafatos read a passage from Euripides’ Iphigenia and explained the history and drama.
124. Evaluation of Institute for Geodynamics, National Observatory of Athens, May 2022
125. The Unknown is Great. It gives meaning to our being, redefining our need for discovery and knowledge. As children, we face it with awe, like a blank canvas ready to welcome everything we can imagine. And everything we can imagine, we can realize. Kafatos gave a TedxAthens 2022 presentation on The Great Unknown, May 2022
126. Kafatos presented 8/25/2022 – 8/28/2022 <http://www.nftkorea.or.kr/>. Invited talk and NFT Art (8/25 & 8/26) at the NFT Korea 2022

CONFERENCE PRESENTATIONS AND WORKSHOPS - (PARTIAL LIST)

2023

Seung Hee Kim, Yi Victor Wang, Soorok Ryu, Geunsu Lyu, Choeng-Lyong Lee, Gyuwon Lee, Ki-Hong Min, and Menas Kafatos 2023 Assessment of Mesoscale Convective Systems nowcasting using dual-polarimetric Doppler Radar data and Deep Learning techniques during warm season. The 103rd AMS Annual Meeting, Denver CO. Seung Hee Kim, Yi Victor Wang, Soorok Ryu, Geunsu Lyu, Choeng-Lyong Lee, Gyuwon Lee, Ki-Hong Min, and Menas Kafatos 2023 Assessment of Mesoscale Convective Systems nowcasting using dual-polarimetric Doppler Radar data and Deep Learning techniques during

warm season. The 103rd AMS Annual Meeting, Denver CO. Seung Hee Kim, Yi Victor Wang, Soorok Ryu, Geunsu Lyu, Choeng-Lyong Lee, Gyuwon Lee, Ki-Hong Min, and Menas Kafatos 2023 Assessment of Mesoscale Convective Systems nowcasting using dual-polarimetric Doppler Radar data and Deep Learning techniques during warm season. The 103rd AMS Annual Meeting, Denver CO.

Seung Hee Kim, Yi Victor Wang, Soorok Ryu, Geunsu Lyu, Choeng-Lyong Lee, Gyuwon Lee, Ki-Hong Min, and Menas Kafatos 2023 Assessment of Mesoscale Convective Systems nowcasting using dual-polarimetric Doppler Radar data and Deep Learning techniques during warm season. The 103rd AMS Annual Meeting, Denver CO.

2022

Yi Victor Wang, Seung Hee Kim, Gyuwon Lee, and Menas Kafatos 2022 Pixelwise Modeling with Two-Dimensional Convolutional Long Short-Term Memory Networks for Nowcasting Heavy Rainfall. American Geophysical Union Fall Meeting, Chicago IL.

Ouzounov D., S.Pulinets, J.Y Liu, K.Hattori, M.Kafatos, P.Taylor (2022) Spatial features of pre-earthquake signatures in the Atmosphere/Ionosphere connected with the earthquake preparation zone. EMSEV 2022, 22 -26, Aug 2022, National Central University, Taoyuan, Taiwan (plenary speech, virtual)

Ouzounov D., K. Hattori, M. Kafatos Reoccurrence of transient effects in the atmosphere and ionosphere preceding large events. Case study for 2015 M7.8 and M7.3 Gorkha–Nepal earthquakes, CeRES 2022 Symposium, Chiba, Japan(Invited, virtual)

Ouzounov D., S.Pulinets, J.Y Liu, K.Hattori, M.Kafatos, P.Taylor (2022) Identification of pre-earthquake atmospheric and ionospheric anomalies and their regional features, Session M-IS10 “Interdisciplinary studies on pre-earthquake processes. JpGU Meeting, May 2022, Japan (Invited, virtual)

Ouzounov, D., Taylor, P., Kafatos, M., and Cutchins, K.: Lunar TLP's and the tectonic processes of the Earth and the Moon, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-12932, <https://doi.org/10.5194/egusphere-egu22-12932>, 2022.

Ouzounov D., S.Pulinets, J.Y Liu, K.Hattori, M.Kafatos, P.Taylor (2022) Regional dependency in the reoccurrence of the pre-earthquake transient signals in the atmosphere and ionosphere, Session ST27 - Lithosphere-Atmosphere-Space Coupling, Asia Oceania Geosciences Society (AOGS) 01-05 August 2022 (Virtual)

2021

Seung Hee Kim, Yi Victor Wang, Soorok Ryu, Gyuwon Lee, and Menas Kafatos 2021 Assessment of relative importance of radar products for nowcasting heavy rainfall using machine learning techniques. American Geophysical Union Fall Meeting, New Orleans LA.

Seung Hee Kim and Menas C Kafatos. 2021 Assessment of wildfire danger under warming climate. The workshop on Bringing Land, Ocean, Atmosphere and Ionosphere Data to the Community for Hazard.

Ouzounov D. , S. Pulinets, D. Davidenko, X. Shen, Z. Zeren, J. Huang, R. Yan, A. Rozhnoi, M. Solovieva, J.Y. Liu, K. Hattori, M. Kafatos, Multi-parameter observation of pre-earthquake signals in atmosphere-ionosphere. Case study for M7.1 Ridgecrest, CA earthquake of July 2019, Seismology Society of America Annual Meeting, 19–23 April 2021.

Ouzounov D., S. Pulinets, J.Y. Liu, K. Hattori, M. Kafatos, P. Taylor (2021) The spatiotemporal evolution of atmospheric/ionospheric pre-earthquake anomalies in association with the preparation zone, , Joint Scientific Assembly, IAGA-IASPEI 2021, 21-27 AUGUST 2021 | VIRTUAL CONFERENCE

Karastathis V., George Eleftheriou, Menas Kafatos, Kanaris Tsinganos, Akis Tselentis, Dimitar Ouzounov⁴ and Evangelos Mouzakiotis Radon Monitoring in Gulf of Corinth, Greece. A Long Term Monitoring and Correlation with Seismicity. (Invited), AGU Fall meeting 1-17 Dec , 2020

Ouzounov D., Sergey A Pulinets, Alexander Rozhnoi, , Mariya Solovieva, Menas Kafatos, , Andrew Papilion, Patrick T Taylor, Observing of pre-earthquake transients features in atmosphere-ionosphere associated with January 2020 Caribbean earthquakes, AGU Fall meeting 1-17 Dec , 2020

Ouzounov D., M. Kafatos, P. Taylor, Geohazard and Climate adaption: impacts and interconnectivity, Virtual EGU Meeting 19-30, April, 2021

Ouzounov D., S. Pulinets, J.Y. Liu, K. Hattori, M. Kafatos, P. Taylor, The spatiotemporal evolution of pre-earthquake anomalies and their association with the activation zone (Invited) , Japan Geoscience Meeting, May 30-June 6, 2021, Virtual

Ouzounov D. S. Pulinets, J.Y. Liu, K. Hattori, M. Kafatos, P. Taylor (2021) Reappearing of pre-earthquake signals in atmosphere-ionosphere during large seismic sequences. Case study for M8.1 Kermadec- New Zealand seismic sequence and tsunami of March 4, 2021, Fall AGU 2021 New Orleans, (Virtual)

Ouzounov D., S. Pulinets, X. Shen, J.Y. Liu, K. Hattori⁵, Y. Yang, R. Yan, J. Lin, J. Cui, M. Kafatos, L. Petrov, P. Taylor* (2021) Observed pre-earthquake transients features in the Earth's atmosphere-ionosphere environment associated with M8.2 earthquake, July 28th Chignik, Alaska, Fall AGU 2021 New Orleans (Virtual)

2020

- Francis Fujioka S. C. Chen, S. H. Kim, and M. Kafatos 2020: A New Perspective of the Weather Effects on the Energy Release Component in the National Fire Danger Rating System: The *Reaction Intensity Partitioning* Concept. *13th Fire and Forest Meteorology Symposium. Postponed due to the COVID-19.*
- Seung Hee Kim, Yun Gon Lee, Chul-Hee Lim, Woo-Kyun Lee, Kwang Nyun Kim, Jaemin Kim, Eunsun Jeong and Menas Kafatos 2020: Assessment of the Impact of Water Body Changes on Fog Formation. *Asia Oceania Geosciences Society Annual meeting Hongchun Rep. of Korea. Canceled due to the COVID-19.*
- Shenyue Jia, Menas Kafatos, Seung Hee Kim, Keun Hang Yang, Son V. Nghiem, Haris Kontoes, Anestis Trypitsidis 2020: Assessment of Recent Large Wildfires in Semi-arid Ecosystems in the World. *Asia Oceania Geosciences Society Annual meeting Hongchun Rep. of Korea. Canceled due to the COVID-19.*
- Kristen Whitney, Seung Hee Kim and Menas Kafatos 2020: Estimating Impact of Pre-wildfire Conditions on Post-fire Severity Using Remote Sensing in Southern California. *Asia Oceania Geosciences Society Annual meeting Hongchun Rep. of Korea. Canceled due to the COVID-19.*
- Son Nghiem, Adam Mathews, Mark Jacobson, Marco Masetti, Alessandro Sorichetta, Seung Hee Kim, Menas Kafatos, Ramesh Singh, Isabelle De Smedt, Andreas Richter, Hanlim Lee, Yun Gon Lee, Tae Byeong Chae 2020: Urbanization and Air Pollution Impacts in Asia. *Asia Oceania Geosciences Society Annual meeting Hongchun Rep. of Korea. Canceled due to the COVID-19.*
- Ouzounov D, S. Pulinets, A.Rozhnoi, M. Solovieva, K. Hattori. M. Kafatos, P. Taylor Transient Effects in Atmosphere and Ionosphere Associated with January 2020 Caribbean Earthquakes, MIS09-18, JpGU-AGU meeting, Chiba, Japan, April 2020.
- Ouzounov D, S. Pulinets, G. Guiliani, S. Velichkova-lotsova, M. Kafatos, and P. Taylor , Pre-earthquake processes associated with the M6.4 of Nov 26, 2017 In Albania. A Multi parameters analysis. EGU2020, Vienna, Austria.
- Ouzounov D, M. Kafatos, G. Guiliani, S.Pulinets, J.Y. Liu, K. Hattori, M. H. Pajares, A. Garcia-Rigo, A. Rozhnoi, M.Solovieva, V. Fedun, A. Papillon, P. Taylor; Observing of pre-earthquake transients features in the Earth atmosphere-ionosphere environment associated with M6.4 and M7.1 Ridgecrest, California, Earthquakes of July 2019, AGU Fall Meeting Dec 2019, Abstract NH53C-0819.
- Saivism and the Significance of Mahasivaratri, Bahamas, February, 2020
- ECOS, Earth Friendly Products' Presentation sustainability educational program: The role of humans on the environment, what COVID-19 is telling us, challenges for the future, April 16, 2020 (via Zoom)
- The Nature of the Mind: The Science and Spirituality of Consciousness, Menas Kafatos, Subhash Kak, Prantik Kundu, and Swami Brahmananda, Bahamas, June, 2020 (via Zoom). The questions remain the same for humanity since antiquity. What does science say about the nature of reality, what do the scriptures say, and how are the common findings relevant for humans in our search for meaning in our lives? <https://sivanandabahamas.org/course/the-nature-of-the-mind-june-2020/>
- Humanlinks Festival, <https://festival.humanlinks.gr/> Facebook: <https://www.facebook.com/3rdhumanlinksfestival2020>
- Serenity Ridge Dialogues <https://us02web.zoom.us/j/84946602835?pwd=aUwvVndQZTd1aVVyK3NZUFA1RIIGdz09> Serenity Ridge Dialogues: Body, Breath & Mind—Online via Zoom with Geshe Tenzin Wangyal Rinpoche and Guests.

2019

- Science Collaboration of the Center of Excellence in Earth Systems Modeling & Observations (CEESMO) at Chapman University, Space Technology Application Center at Vietnam National Space Center (VNSC), National Institute of Oceanography, Vietnam Academy of Science and Technology (VAST), NASA Jet Propulsion Laboratory and Loyola Marymount University. 2019 Center of Excellence in Earth Systems Modeling & Observations (CEESMO) at Chapman University Orange CA.
- Delegation from the Department of Natural Resources of Jiangsu Province China. 2019 Chapman University Orange CA
- Session Chair “NH52A and NH-43C: Wildfire Hazards, Damage, and Mitigation Strategies in a Changing World.” American Geophysical Union Fall Meeting, San Francisco CA
- Menas Kafatos and Seung Hee Kim 2019 Remote Sensing and Modeling for Hazards. *Joint Workshop: Earth Observation Data applications on Land Use Land Cover Change and Disaster Risk in Mid-Latitude Region and Southeast Asia, Seoul Korea*
- Menas Kafatos Seung Hee Kim, Shenyue Jia, and Kristen L. Whitney 2019 Earth System Science Research at CEESMO. *Earth Science and Applications of Satellite X-Band Synthetic Aperture Radars in Synergy with Multi-Frequency Sensors, Surface Networks, and Modeling, International Science and Applications Meeting and Field Work Hanoi, Vietnam*
- Seung Hee Kim and Menas Kafatos 2019 Assessing Drought Impact on Agriculture using Seasonal to Subseasonal (S2S) data. *Earth Science and Applications of Satellite X-Band Synthetic Aperture Radars in Synergy with Multi-Frequency Sensors, Surface Networks, and Modeling, International Science and Applications Meeting and Field Work Hanoi, Vietnam*
- Seung Hee Kim, Jinwon Kim and Menas Kafatos 2019 Assessing Agricultural Productivity of Subseasonal to Seasonal Timescale and Decade to Century Timescale Using Agricultural Model. *Satellite Observations of Environmental Changes from Rural to Mega Urban Areas - Impacts and Implications, Ho Chi Minh City, Vietnam.*
- Shenyue Jia, Seung Hee Kim, Menas Kafatos Fleeing pattern revealed in a space-time cube: the case of Woolsey Fire, Esri User Conference 2019, San Diego, USA, July 8-12, 2019
- Kristen Whitney, Seung Hee Kim, Menas Kafatos Modeling Live Fuel Moisture with MODIS Satellite Data *Earth Science Information Partners (ESIP) Summer Meeting, July 16-19, 2019, Tacoma, WA*
- Shenyue Jia, Seung Hee Kim, Son V. Nghiem, Menas Kafatos, Live fuel moisture estimation using SMAP soil moisture and MODIS vegetation indices in Southern California, USA, *IEEE 2019 International Geoscience and Remote Sensing Symposium (IGARSS 2019), Yokohama, Japan, July 28-August 2, 2019.*
- Seung Hee Kim and Menas C. Kafatos 2019: Agricultural Modelling. *Horizon 2020 EOPEN Project Special Session in the 40th Asian Conference on Remote Sensing (ACRS) Daejeon, Republic of Korea.*
- Shenyue Jia, Seung Hee Kim, Son V. Nghiem, Kristen Whitney, Boksoon Myoung and Menas C. Kafatos 2019: Assessing Wildfire Danger in Southern California, USA, *Joint Wildfire Research Team Meeting (Gwangju Institute of Science and Technology (GIST), The University of Tokyo and Chapman University). Seoul, Republic of Korea.*
- Mijin Kim, Jhoon Kim, Seung Hee Kim, Woogyung Vincent Kim, Yun Gon Lee and Menas C. Kafatos 2019: Assessment of Global Distribution and Temporal Changes of Background Aerosol Optical Depth. *American Geophysical Union Fall Meeting, San Francisco CA.*

- Wonhee Cho, Seung Hee Kim, Mijin Kim, Yun Gon Lee, Kwang Nyun Kim and Menas C. Kafatos 2019: PM10 Estimation using Applying Time Variation and recurrent neural network. *American Geophysical Union Fall Meeting, San Francisco CA.*
- Kristen L. Whitney, Seung Hee Kim and Menas C. Kafatos 2019: Modeling Live Fuel Moisture with MODIS and VIIRS Satellite Data in Los Angeles County, California. *American Geophysical Union Fall Meeting, San Francisco CA*
- Shenyue Jia, Seung Hee Kim, Son V Nghiem and Menas C. Kafatos 2019: A New Method for Plant Flammability Estimation Using SMAP Soil Moisture. *American Geophysical Union Fall Meeting, San Francisco CA*

2018

- Sivananda Ashram Yoga Retreat: Living the Living Presence and Qualia, Feb 12-15, 2018
- Sivananda Ashram Yoga Retreat: Qualia - The Foundation of the Science of Consciousness, May 21-25th, 2018 - [Link](#)
- Esalen Workshop, Big Sur, CA, April 20-22, 2018, [Consciousness and Transformation in Kashmir Shaivism and Sri Aurobindo](#) - [Link](#)
- Interface Conference, Symposium on Data Science and Statistics, Reston, VA, May, 17, 2018 - [Link](#)
- 15th Annual Building Bridges for TCM Conference, Health Consciousness, Giving Knowledge Life, Reston, VA - Oct. 11-14, 2018 - [Link](#)
- Ego and Self Workshop, YperNoisis, Greece, June 6, 2018
- Who am I? The Universe the Self and the Presence Workshop, Kallignosia Irakleion Crete June 15, 2018.
- Symi Symposium 20th Anniversary, Harnessing Globalization; An agenda for the next twenty years, Lindos, Rhodes, July 1-6, 2018. - [Link](#)
- American Geophysical Union Fall Meeting, Several presentations on Wildfires and Earthquakes. December 2018, Washington D.C. - [Link](#)
- Seung Hee Kim, S. Jia, K. Whitney, and M. C. Kafatos 2018 Assessing Wildfire Danger in Southern California's Chaparral Ecosystem Using MODIS Satellite Data. *NASA Land Use Status, Change and Impacts in Vietnam, Cambodia and Laos International Science Team Meeting and Field Work, Hanoi Vietnam.*
- Seung Hee Kim, Shenyue Jia, Son V. Nghiem, Kristen Whitney, and Menas C. Kafatos 2018 Recent Trend of Drying-Down Period of Live Fuel Moisture and Wildfires in Southern California USA. *Asia Oceania Geosciences Society Annual Meeting Honolulu, HI.*
- Shenyue Jia, Seung Hee Kim, Son V. Nghiem, Kristen Whitney, Boksoon Myoung and Menas C. Kafatos. 2018 Assessing Wildfire Danger and Post-Fire Damages in Southern California USA. *38th EARSeL Symposium 2018 & 3rd Joint EARSeL LULC/NASA LCLUC Workshop, Chania Greece.*
- Menas C. Kafatos, Seung Hee Kim, Shenyue Jia, and Jinwon Kim "Effects of the high resolution sea surface temperature data on simulating warm-season climate and crop productivity over the Southwestern United States" *The 7th International Conference on Agro-Geoinformatics August 2018 Hangzhou, China*
- Menas C Kafatos and Seung Hee Kim "Multi-Model Regional Simulation of Climate Change Impacts on Agroecosystems for Semi-arid Regions" *The 7th International Conference on Agro-Geoinformatics August 2018 Hangzhou, China*
- Kristen Whitney, Seung Hee Kim, Shenyue Jia, and Menas C. Kafatos. "Estimation of the relationship between satellite-derived vegetation indices and live fuel moisture towards wildfire risk in

Southern California" *The 7th International Conference on Agro-Geoinformatics August 2018 Hangzhou, China*

- Shenyue Jia, Seung Hee Kim, Son V Nghiem, and Menas Kafatos 2018 Near-Real Time Population Movement during an Emergency: A Case Study on the Mendocino Complex Fire with Disaster Maps by Facebook. *American Geophysical Union Fall Meeting Washington DC.*
- Shenyue Jia, Seung Hee Kim, Son V Nghiem, Kristen L. Whitney and Menas Kafatos 2018 Change of Vegetation Health inside Fire Perimeters in Southern California: An Analysis of Drought and Fire Interactions since 2000. *American Geophysical Union Fall Meeting Washington DC.*
- Yun Gon Lee, Kwang Nyun Kim, Seung Hee Kim, and Menas Kafatos 2018 Assessments of Factors Influencing Large Wildfires Using Remote Sensing Data in South Korea. *American Geophysical Union Fall Meeting Washington DC.*
- Menas Kafatos Seung Hee Kim Shenyue Jia Kristen L. Whitney Francis Fujioka and Son V Nghiem 2018, Live Fuel Moisture and Large Wildfire Trends in Southern California. *American Geophysical Union Fall Meeting Washington DC.*
- Kristen L. Whitney, Seung Hee Kim, Shenyue Jia, and Menas Kafatos 2018 Relationship of In-situ Live Fuel Moisture Measurement and MODIS data in Los Angeles County, California USA. *American Geophysical Union Fall Meeting Washington DC.*

2017

- Sivananda Ashram Yoga Retreat: Deepak Chopra and Menas C. Kafatos, "You Are the Universe" (Symposium, Workshops and Book Signing), Paradise Island, Bahamas, February 3-5, 2017.
- Sivananda Ashram Yoga Retreat: Sally Kempton: "Chakras and Tantra: The Goddess." Swami Brahmananda: "Advaita Vedanta." Menas C. Kafatos: "Kashmir Saivism." Debashish Banerjee: "Sri Aurobindo." The Nature of Reality: Advaita Vedanta, Kashmir Shaivism, the Goddess, Sri Aurobindo (Symposium, Workshops), Paradise Island, Bahamas, February 17-21, 2017.
- UCLA Lifespan Learning Institute & Longevity Center: Mind, Consciousness and The Social Brain: Transformation Through the Lifespan: Dan Siegel, Deepak Chopra, Rudy Tanzi, Marion Solomon. "Living the Living Presence", Semel Institute, UCLA, March 19, 2017.
- Neuroscience & Leadership Summit: 4th Annual Meeting, Chapman University, March 24, 2017.
- Anastamos Journal, (interdisciplinary journal in humanities): Chapman University, April 19, 2017.
- Acropolis Museum: "Living the Living Presence: The Laws of the Universe in the Present" ("Βιώνοντας τη Ζωντανή Παρουσία: Οι Νόμοι του Σύμπαντος στο Παρόν", in Greek) and Book Signing, Athens, Greece, June 9, 2017.
- Titania Hotel: "Living the Living Presence: The Clear Mind" ("Βιώνοντας τη Ζωντανή Παρουσία: Ο Καθαρός Νους", in Greek) and Book Signing, Athens, Greece, June 11, 2017.
- Safe Athens, 2016: "Interdisciplinary Science for Hazards: The Nexus of Theory and Societal Applications", Athens, Greece, June 28, 2017.
- Symi 18th Symposium: Cyber Challenges for Peace, Democracy, Communication, "Isolation despite Interconnectivity", Elounda, Crete, July 2-6, 2017.
- 14th Annual Building Bridges for TCM Conference - September 14, 2017
- National Hellenic Society, Heritage Weekend and Classic, The Quantum Universe and Reality. Las Vegas, NV, USA, October 5-8, 2017.
- The 18th World Knowledge Forum Inflection Point: Towards New Prosperity, Natural Laws in the Quantum Universe, in *The Promises and Perils of AI* panel, Shilla Hotel, Seoul, ROK, October 17-19, 2017.

- 2nd International Conference on Quantum Physics and Quantum Technology Theme: Chronicling the Progressions of Quantum Physics Theories to the Advanced Technologies. A talk on Universal Quantum Laws, Health and Well-Being SEPT 25-26th, 2017 Berlin, Germany.
- Eric G. Strauss, Menas C. Kafatos, Sung Hee Kim, Son V. Nghiem, and Jeremy Pal 2017 Applying Remote Sensing to Urban Ecosystem Dynamics: Opportunities for Understanding and Managing the Ballona Wetland System in Los Angeles. *IEEE Geoscience and Remote Sensing Society, Fort Worth Texas.*
- Kim, Seung Hee 2017 Assessing Relationship Between Climate Variability and Drought using Multiple Indices. *Climate Change and Drought: Agriculture and Forest sector; MOTIVE Project Advisory Seminar, Seoul Korea.*
- Kim, Seung Hee, Jinwon Kim, Woo-Kyun Lee, Chul-Hee Lim, Myoung-Seok Suh, Seok-Geun Oh, Marcus Chong and Menas C. Kafatos 2017 Assessing Climate Change Impacts on Wildfire Potential in the Korean Peninsula. *Asia Oceania Geosciences Society Annual Meeting, Singapore.*
- Menas C. Kafatos, Seung Hee Kim, Chul-Hee Lim, and Woo-Kyun Lee 2017 Responses to Climate Change, Resilience in the MLRN and Specifics for Agro-ecosystems. *Asia Oceania Geosciences Society Annual Meeting, Singapore.*
- Menas C. Kafatos, Seung Hee Kim, and Shen Yue Jia 2017 Relationship between Climate Variability, Wildfire Risk, and Wildfire Occurrence in Wildland-Urban Interface of the Southwestern United States. *American Geophysical Union Fall Meeting New Orleans, LA.*

2016

- The Embrace of the Earth Conference 2016: Mind, Consciousness, and Humankind's Connection with Nature, Planetary Consciousness and Humanity's Destiny, Monday & Tuesday, May 23 & 24, 2016, California Institute of Integral Studies, <http://www.ciis.edu/public-programs-and-performances/conferences/embrace-of-the-earth-conference-2016>
- Foundations of Mind Conference 2016: Fundamental Awareness: The Foundation of the Universe Chair, Speaker, May 18-20, 2016, Berkeley, CA, <http://foundationsofmind.org/schedule.html>
- Major Public Lecture: Athens Megaron Lecture, Science, Consciousness and Human: How Modern Science Meets Ancient Philosophy, June 9, 2016 <http://www.blod.gr/lectures/Pages/viewlecture.aspx?LectureID=2880#>
- *Sages & Scientists Symposium, 2016*: "Living the Living Presence in the Quantum Universe", September 9-11, 2016, Beverly Hills, CA <https://www.choprafoundation.org/events-initiatives/sages-scientists/sas16/>
- *Science and Nonduality, 2016*: "Experience a Universe without Boundaries: Ancient and Modern Wisdom" Menas C. Kafatos and Neil D. Theise (Workshop), October 20, 2016
- "Living the Living Presence", October 22, 2016, Dolce Hayes Mansion, San Jose, CA.
- Global Internship, Korea University, November 21-25, 2016.
- UNOSD Workshop, Korea University, November 28-29, 2016.
- *The Science of Spirituality: Orthodox Perspective, 2016*: [Huffington Center of Saint Sophia Cathedral](#), October 26: "The Quantum Universe we Live in," November 9: "Living the Living Presence"; December 7: "The Inner Light."
- *American Geophysical Union Fall Meeting* December 11-16, 2016, San Francisco, CA: Several presentations on Wildfires and Earthquakes.
- Dialogues between Science and Spirituality Experiencing Inner Awareness in Practice: Huffington Center of Saint Sophia Cathedral, May 11, 2016 (and several previous)
- Esalen Workshop: March 4-6, 2016 Science and Spirituality Missing Link

- Sivananda Ashram Yoga Retreats: April 17-21, 2016 The Nature of Consciousness <http://www.sivanandabahamas.org/course/the-nature-of-consciousness-april-2016/>
- Sympo Symposium, Kos, Greece, 10-14 July, organized by the A. Papandreou Foundation, Chairman, G. Papandreou, Fr. PM Greece
- Invited presentation to Professor Kyung-Ja Ha's graduate seminar on climate change and consciousness, Pusan National University. Discussions with students and faculty at the Research Center for Climate Sciences (RCCS) Global Research Laboratory (GRL). August 5, 2016.
- Kim, Seung Hee, and Menas Kafatos 2016 Application of Crop Modeling in Mid-Latitude Region. *The 3rd IIASA-KU Workshop for Mid-Latitude R/D Network. Seoul, South Korea.*
- Kim, Seung Hee, Chul-Hee Lim, Boksoon Myoung, Jinwon Kim, Woo-Kyun Lee, Menas Kafatos. 2016 Assessments of Future Maize Yield Potential Changes In The Korean Peninsula Using Multiple Crop Models. *Asia Oceania Geosciences Society Annual Meeting, Beijing China.*
- Menas C. Kafatos, Seung Hee Kim, Jinwon Kim, Francis Fujioka, and Boksoon Myoung. 2016 Assessing Climate Changes in Early Warm Season and Its Impacts on Wildfire Potential in the Southwestern United States. *American Geophysical Union Fall Meeting San Francisco, CA.*
- Kim, Seung Hee, Chul-Hee Lim, Jinwon Kim, Woo-Kyun Lee, and Menas Kafatos. 2016 Assessments of Future Maize Yield Potential Changes in the Korean Peninsula Using Multiple Crop Models. *American Geophysical Union Fall Meeting San Francisco, CA.*

2015

- *SafeChania 2015: The Knowledge Triangle in the Civil Protection Service*, Great Arsenal, Center of Mediterranean Architecture, Old Venetian Harbor of Chania, Crete, Greece, 10-12 June 2015. "Interdisciplinary Science for Hazards and the Knowledge Triangle; Earthquakes and Wildfires." www.safechania2015.tuc.gr <http://www.safechania2015.tuc.gr/>
- *Asia Oceania Geosciences Society (AOGS) 2015*. Singapore, 1-6 August, 2015. Oral Presentation, Session AS27-23-A003: Impact of Gulf of California SST on Regional Climate Model and Crop Productivity in the Southwestern United States.
- S.H. Kim, J. Kim, R. Walko, B. Myoung, D. Stack, M.C. Kafatos, 2015: Climate Change Impacts on Maize-yield Potential in the Southwestern United States. 29, 279-280, *Procedia Environmental Sciences*.
- B. Myoung, S.H. Kim, D.H. Stack, J. Kim, M.C. Kafatos, 2015: Temperature, Sowing and Harvest Dates, and Yield Potential of Maize in the Southwestern US. 29, 276, *Procedia Environmental Sciences*.
- S.H. Kim, B. Myoung, D. Stack, N. Hatzopoulos, J. Kim, D. Medvigy, R. Walko, M. Kafatos, 2015: Multi-Model Regional Simulation of Climate Change Impacts on Agriculture and Ecosystems in the Southwestern United States. *2015 NIFA Climate Change Project Directors' (PD) meeting, Washington D.C.*
- Kim, S.H., J. Kim, R. Walko, B. Myoung, D. Stack, and M. Kafatos, 2015: Climate Change Impacts on Maize-yield Potential in the Southwestern United States. *American Society of Agricultural and Biological Engineers (ASABE) 1st Climate Change Symposium: Adaptation and Mitigation. Chicago, IL.*
- Kim, S.H., J. Kim, A. Prasad, D. Stack, B. Myoung and M. Kafatos, 2015: Impact of Gulf of California SST on Regional Climate Model and crop productivity in the Southwestern United States. *Asia Oceania Geosciences Society 12th Annual Meeting, Singapore.*
- *American Geophysical Union*, AGU Fall Meeting December 14-18, 2015: S.H. Kim, C-H. Lim, B. Myoung, J. Kim, S-g. Lee, W-K. Lee, M. Kafatos. Assessments of Maize Yield Potential in the Korean Peninsula using Multiple Crop Models.

- AGU Fall Meeting December 14-18, 2015, Characterizing Wildfires at Regional and Local Scales, Oral Presentation, Session ID#: NH31A, Wildfire Danger Potential in California
- AGU Fall Meeting December 14-18, 2015 Transient effects in Atmosphere and Ionosphere preceding the two 2015 M7.8 and M7.3 Earthquakes in Nepal, Oral Presentation, D. Ouzounov, et al., Session #NH32B
- AGU Fall Meeting December 14-18, 2015, Temporal-spatial pattern of pre-earthquake signatures in atmosphere and ionosphere associated with major earthquakes in Greece, Poster Presentation, S. Calderon et al., Session ID#: NH21A
- AGU Fall Meeting December 14-18, 2015, Impact of springtime NAO on weather conditions and snow melting in the SW US, Oral Presentation, B. Myoung et al., Session ID#: GC43D\
- *Science and Nonduality (SAND)*: October 22-25, 2015, Invited talk; panel discussion; and workshop
- UCLA: December 5, 2015 <http://lifespanlearn.org/index.php/conferences/upcoming-conferences/disorganized-attachment-mary-main-erik-hesse-dan-siegel-may-15-17-2015#general-information>

2014

- *Joint Agricultural Meeting*, Long Beach, CA, 3-5 November, 2014. Oral Presentation: "Climate Impacts on Agriculture in SW USA."
- *American Geophysical Union* San Francisco, CA, 15-19 December, 2014. Oral Presentation, Session NH21C: "Interdisciplinary Study of Pre-earthquake Processes: Observation, Validation, Modeling, and Forecasting."
- *American Geophysical Union* 2014. Oral Presentation, Session on Interdisciplinary study of pre-earthquake processes: "A strategy for short-term earthquake forecasting based on combined ground and space-based observations."
- *American Geophysical Union* 2014. Oral Presentation, Session GC22D: "Improving the Simulation of Climate Impacts on Agriculture: AgMIP and Related Research."
- *AOGS 2014*. Ouzounov D., Pulinets, S., Hattori, K., Mogu, T., Kafatos, M. Evaluation of Pre-earthquake Atmospheric Signals and Their Connection with Major Seismicity, IG27-A015, 28 July-1 August 2014, Sapporo, Japan.
- Kim, S.H., Kim, J., Myoung, B., Walko, R., Kafatos, M. Simulated Maize Yields Under Climate Change in the Southwestern United States, IG10-A016, 28 July-1 August 2014, Sapporo, Japan.
- Myoung, B., Kim, S.H., Kim, J., Stack, D., Kafatos, M. Temperature, Sowing Date, and Yield of Maize in the Southwestern US, IG10-A007, 28 July-1 August 2014, Sapporo, Japan.

2013

- Ouzounov D., S. Pulinets, M. Kafatos, Evaluation of Pre-earthquake Atmospheric Signals and Their Connection with Earthquakes. Case Studies for Japan, Mexico and Taiwan, AGU meeting of Americas, May 14-17, 2013, Cancun 14017. Mexico, Abstract NH42A-07.
- Ouzounov D., M.Kafatos Multi-parameter observations of atmospheric pre-earthquake signals and their validation: Potential for Future. CSEP Workshop on Testing External Forecasts and Predictions," May 7-8, 2013, University of Southern California, Los Angeles.
- Ouzounov D., S.Pulinets, V. Tramutoli, L. Lee, T. Liu, M. Hayakawa, K. Hattori, M. Kafatos, P.Taylor Integrated observation and analysis of pre-earthquake related signals over major geohazard sites, EGU General Assembly April 7-12, Vienna, Austria, Geophysical Research Abstracts ,Vol. 15, Vol. 15, EGU2013-6552

- Anagnostopoulos, G C, Ouzounov, D P, Pulinets, S A, Efthymiadis, Kafatos, M Studying atmosphere/ionosphere processes associated with seismicity. What we learned from the severe thunderstorm in Greece, June 27, 2010 Abstract NH41B-1603, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec
- Papadopoulos, G, Ouzounov, D, Pulinets, S, Kafatos, M. An evaluation of the multidisciplinary precursors preceding the L'Aquila earthquake (Mw=6.3) of 6 April 2009 Abstract NH41B-1600, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec
- Ouzounov, D P, Pulinets, S A, Davidenko, D , Hattori, K, Kafatos, M, Taylor, P Multi-sensor observations of earthquake related atmospheric signals over major geohazard validation sites, Abstract NH44A-05, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec

2012

- Ouzounov D., S. Pulinets, G. Papadopoulos, V. Kunitsyn, K. Hattori , M. Kafatos , P. Taylor, Multi-sensors observations of pre-earthquake signals. What we learned from the Great Tohoku earthquake? International Workshop on Electromagnetic Phenomena Associated with Earthquakes and Volcanoes October 1-4, 2012, Shizuoka, Japan
- Ouzounov D., S. Pulinets, M. Parrot, J.Y. Liu, K. Hattori, M. Kafatos, P. Taylor Multi-Parameter Observation and Detection Pre-Earthquake Signals In Seismically Active Areas, EFP1-O11, 33rd General Assembly of the European Seismological Commission 19-24 August 2012, Moscow, Russia
- Ouzounov D., S. Pulinets, K. Hattori, JY Liu, TY Yang, M. Parrot, M. Kafatos, P. Taylor Inter-Disciplinary Validation of Pre-Earthquake Signals. Case Study for Major Earthquakes in Asia (2004-2010) and for 2011 Tohoku Earthquake, WG14-D3-PM2-Leo4-004, AOGS - AGU (WPGM) Joint Assembly, 13-17 August 2012, Singapore
- Ouzounov D, S. Pulinets, K. Hattori, M. Parrot, J.Y. Liu, T. F. Yang, A. Arellano-Baeza, M. Kafatos, P. Taylor, (2012) Validation of Atmosphere/Ionosphere Signals Associated with Major Earthquakes By Multi-Instrument Space-Borne and Ground Observations, WE2.13.2, IEEE Geoscience and Remote Sensing Society, July 22-27, 2012, Munich, Germany
- D. Ouzounov, K. Hattori, T. Mogi, M. Hayakawa, S. Pulinets, V. Kunitzyn, G. Pappadopoulos, M. Kafatos, and P. Taylor, "From multi-sensors observations towards cross-disciplinary study of pre-earthquake signals. What have we learned from the Tohoku earthquake?" EGU, 2012.
- Hesham M. El-Askary, Anup K. Prasad, Heba M. Marey, Mohamed E. El-Raey, Ghassem R. Asrar and Menas Kafatos "The dynamics of the biomass burning, dust storms, and black cloud formation over Nile Delta, Egypt using a multi sensor approach" AOGS - AGU (WPGM) Joint Assembly, Singapore, 13-17 August 2012.
- Anup K. Prasad, Sachchidanand Singh, Hesham M. El-Askary, Ashok Jaswal, Ghassem R. Asrar and Menas Kafatos "A decade of snow extent, snow water equivalent, snow deposition and melt season dynamics over Himalayas using EOS Terra and Aqua (2000-2012)" AOGS - AGU (WPGM) Joint Assembly, Singapore, 13-17 August 2012.
- Menas Kafatos, Hesham M. El-Askary, Nick Hatzopoulos, Jinwon Kim, Seung Hee Kim, David Medvigy, Anup K. Prasad, David Stack, Craig Tremback, Robert Walko, and Ghassem Asrar "Assessment of Agro-Ecosystem over California using Multi-Model Simulations and Satellite Observations" AOGS - AGU (WPGM) Joint Assembly, Singapore, 13-17 August 2012.
- Ghassem R. Asrar, Anup K. Prasad, Hesham M. El-Askary, Menas Kafatos and Ashok Jaswal "Retreat of Himalayan Glaciers: impact of anthropogenic pollution and dust storms on the regional climate" AOGS - AGU (WPGM) Joint Assembly, Singapore, 13-17 August 2012.

- Ouzounov, D., S. Pulinets, S., Hattori, K., Liu, JY, Yang, TY, Parrot, M., Kafatos, M., P. Taylor, P. "Inter-disciplinary validation of pre-earthquake signals. Case study for major earthquakes in Asia (2004-2010) and for 2011 Tohoku earthquake" AOGS - AGU (WPGM) Joint Assembly, Singapore, 13-17 August 2012.
- Hesham M. El-Askary, Anup K. Prasad, Heba M. Marey, Mohamed E. El-Raey, Ghassem R. Asrar and Menas Kafatos "A multi sensor approach for studying and analyzing the formation and dynamics of the black cloud over Cairo, Egypt" IEEE International Geoscience and Remote Sensing Symposium IGARSS2012, 22-27 July, Munich, Germany, 2012.
- Menas Kafatos, Anup Krishna Prasad, Hesham M. El-Askary, Dimitris G. Kaskaoutis, "Correlation, Vertical Distribution and Column Integrated Characteristics of Aerosols during Winter-time Dust Storms over the Mediterranean region", The 26th International Laser Radar Conference (ILRC), Porto Heli, Peloponnesus, Greece, 25-29 June 2012.
- Hesham M. El-Askary, Anup K. Prasad, Heba M. Marey, Mohamed E. El-Raey, Ghassem R. Asrar and Menas Kafatos "Studying and analyzing the formation and dynamics of the black cloud over Cairo, Egypt, using a multi sensor approach", European Geoscience Union, Vienna, Austria, April 22-27, 2012.

2011

- Hesham Mohamed El-Askary, Walaa Sheta, Anup Krishna Prasad, Hanan Ali, Mohamed Abdel Rahman, Ayman El-Desouki, Menas Kafatos, "Studying Air Quality Dynamics using A Linear Genetic Programming Approach over Remotely Sensed Atmospheric Parameters: case study (Cairo, Egypt)", American Geophysical Union, San Francisco, December 5-9, 2011.
- Anup Prasad, Hesham El-Askary, Ghassem Asrar, Menas Kafatos, Ashok Jaswal, "Impact of dust storms and anthropogenic aerosols on the snow cover and glaciers of the Indo-Gangetic plains and Himalaya region", American Geophysical Union, San Francisco, December 5-9, 2011.
- Menas Kafatos, Ghassem R Asrar, Hesham Mohamed El-Askary, Nikolaos Hatzopoulos, Katharine Hayhoe, Jinwon Kim, Lewis Ziska, David Medvigy, Anup Krishna Prasad, Craig Tremback, Robert L Walko, "Assessing Impacts of Climate Variability and Change on the Agro-ecosystems in California and Southwestern United States", American Geophysical Union, San Francisco, December 5-9, 2011.
- Menas Kafatos, Ghassem Asrar, Hesham El-Askary, Anup Prasad, Katharine Hayhoe, Jinwon Kim, Craig Tremback, "Multi-Model Simulations and satellite observations for Assessing Impacts of Climate Variability on the Agro-ecosystems in California and Southwestern United States", Third Santa Fe Conference on Global and Regional Climate Change, Santa Fe, New Mexico, October 30-November 4, 2011.
- Anup K. Prasad, Hesham M. El-Askary, Sunmin Park, Woo-Kyun Lee and Menas Kafatos, "Dust Cloud detection over China-Korea-Japan using CALIPSO, Cloudsat during yellow dust season", International Symposium on Remote Sensing ISRS 2011. The Ocean Resort, YEOSU, Korea, November, 2-4 2011.
- Anup K. Prasad, Hesham M. El-Askary, Ghassem R. Asrar, Menas Kafatos and Ashok Jaswal, "Wintertime and Pre-monsoon warming over Himalayan-Tibet Glaciers and Indo-Gangetic plains: Role of desert dust and anthropogenic emissions", International Symposium on Remote Sensing ISRS 2011. The Ocean Resort, YEOSU, Korea, November, 2-4 2011.
- Menas Kafatos, Hesham Mohamed El-Askary, Anup Krishna Prasad, "Multi Sensor Observations on the Implications of desert dust transport to the Nile Delta, the Indo-Gangetic Basin and Himalayan

Glaciers”, The Sixth International Workshop on Sandstorms and Environmental Impact Assessments, Glyfada-Athens, Greece, on 7-9 September 2011.

HONORS/BOARDS/MEMBERSHIPS/BRIDGING THE DISCIPLINES - (PARTIAL LIST)

Kafatos is internationally known for bridging the disciplines, writing and lecturing extensively on the convergence between science and philosophy as the need for real dialogue between science, spirituality and religion.

- The Fletcher Jones Endowed Chair Professor of Computational Physics, Chapman University
- Distinguished Faculty Award, George Mason University, 1986
- University Professor of Interdisciplinary Sciences, George Mason University, 1984-2008
- Honorary Member, Romanian Academy of Sciences, elected 2000
- National Academy of Sciences' US National Committee on Data for Science and Technology (CODATA) - past, 2000-2003; International Astronomical Union (IAU), on-going
- Federation of Earth Science Information Partners (member of its Executive Committee); and Chair of its Partnership Committee (responsible for new ESIP members), 1999-2001
- American Astronautical Society, Vice President for Education, 2001-2003
- American Association for the Advancement of Science (AAAS); American Astronomical Society (AAS); American Geophysical Union (AGU); American Physical Society (APS); Hellenic Astronomical Society; Royal Astronomical Society (RAS); IEEE Computer Society, on-going Science Steering Committee, Sand & Dust Storms-Warning and Assessment System, sponsored by the World Meteorological Organization, etc., 2005-present
- Member, Board of Trustees, Universities Space Research Association (USRA), 2006-2008.
- Member, OCTANe Board, 2010-2013
- Recipient of the Spirit of Rustom Roy Award, Chopra Foundation, February 26, 2011: honors individuals whose devotion and commitment to their passion for finding answers in their field is matched only by their commitment to humanity.
- IEEE Orange County Chapter - Outstanding Leadership and Professional Service Award, October, 2011
- Member, Chapman University \$1M Club (2013)
- Chairman of the Board of Trustees and President, American Hellenic Council (2014-2018)
- Member, Board of Trustees, World Affairs Council of Orange County
- Member, Editorial Board, Philosophy Study (David Publishing Co.)
- Referee for several scientific journals including Journal of Climate; Natural Hazards and Earth Systems Science (NHES); Computers and Geosciences, etc.
- Affiliated Researcher, National Observatory of Athens, elected June 2013
- International Scholar Kyung Hee University, appointed December 2013
- International Member, BK21+Eco-Leader Education Committee, Korea University (appointed, January 2014; re-appointed February 2021). Provides on-going advice to students at KU and faculty in charge of the program
- International Scholar Korea University, Seoul (March 2015-2017)
- Foreign Member, Korean Academy of Science and Technology (KAST), 2018.
- Denny Award Winner - Joint paper in Operational Oceanography has been chosen as the best paper of the year by the Institute of Marine Engineering, Science and Technology, UK. 2018
- Chairman of the Board, Friends of Sivananda Ashram Yoga in the Caribbean, Inc. (2020-present)

- Organization for a joint lecture with Seon Master SuBul Sunim, Korea, 2017. Joint discussions for the Korean Seon Buddhist TV Network, July 2020 and February 2021.

MEDIA

These sections include interviews, newspaper articles and selected YouTube clips.

Interviews

Interviews for his work on natural hazards, climate change and quantum theory and consciousness have been, as follows:

- He has been interviewed many times since 2005 on national and international TV, including ABC Night News (national news, Aug. 2005) and Korean TV KBS1 (national news, June 2007, aired Sept. 2007). These interviews were focused on hurricanes, earthquake monitoring and aerosol pollution.
- In 2010 and 2011, he was interviewed many times by Greek national newspapers on environmental hazards and climate change, earthquake prediction, quantum theory and the nature of time (*Patris, Ethnos, Eleutherotypia, Kathimerini*). Interviewed several times by radio and TV in Crete.
- Featured as one of the most influential Greeks abroad in a special edition of *The National Herald*.
- Recently, he received extensive media attention after the Japanese earthquake and tsunami in March of 2011 on KCBS, KCAL, KFMB and the OC Register Newspaper. In March 2012, he was interviewed by NBC in regards to tracking the paths across the Pacific Ocean of debris resulting from the Japanese tsunami of 2011. This interview was picked up by 21 NBC affiliated nationwide.
- Featured in the *Wall Street Journal* (2012)
- In the past, he had also been interviewed numerous times by radio stations, local TV stations and newspapers (*Atlanta Journal*) on other work such as black holes, general relativity, etc.
- Korea Newspaper Interviews (2013): The Kyunghyang Shinmun, Newsis, Medipana News, The Youngnamilbo, Financial News, MK News, Jose Ilbo
- KCAL-9 TV had interview-tracking wind patterns from Japan to N. America. (KCBS/KCAL)
- NBC interviews
 - After Brutal Start, Wildfire Season Could Get Much Worse. California is suffering through a particularly destructive start to its annual wildfire season. (2013) - [Link](#)
 - Will Tsunami Debris Reach California? One year after a devastating tsunami hit Japan, scientists are trying to predict if and when a debris field might land on the Southern California coast. (2012) - [Link](#)
- Forecasts featured in OC Register latest story - [Link](#)
- December 2012 Interviews in Cyprus and Greece
 - Interview with PIK, Cyprus - [Link](#)
 - Interview broadcast on 20 December, ECO News - ΣΚΑΙ - [Link](#)
 - Μια Νέα Επιστήμη Βασισμένη στην Συνείδηση - [Link](#)
- Greek Newspaper - Eleutherotypia (2013) - [Link](#)
- EPT (Greek PBS) one hour live interview with host Christos Michaelides
- PBS *Closer to Truth* interview with Robert Kuhn, August 15, 2013 - [Link](#)
- Buddha at the Gas Pump: Interviews with "Ordinary" Spiritually Awakening People

- Discussion with Rick Archer - [Link](#)
 - Kashmir Shaivism, with Rick Archer - [Link](#)
- The Entanglement of Life, with Maurizio Benazzo - [Link](#)
- Interview in Taipei by Dr. Chi-Ming Peng, CEO of WeatherRisk Explore, volunteer for Tzu Chi Foundation. Menas discussed global change and interdisciplinary science, quantum theory and Consciousness, Buddhism and science. - [Link](#)
- Meeting Buddhist Master Cheng Yen in Taipei, Taiwan. Menas and Master Cheng Yen drew parallels between the principles of Buddhism and quantum mechanics. The message promoted in dialogue: Spirituality and science are for serving the people. Consciousness is ultimate Reality. - [Link](#)
- Interview with George Sahinis, Cretetv (Irakleion, Crete - 2016) - [Link](#)
- Interview with George Sahinis, Cretetv (Irakleion, Crete - 2017) - [Link](#)
- Interview with George Sahinis, Cretetv (Irakleion, Crete - 2018) - [Link](#)
- Menas Kafatos - Is The Universe a Mind? With John Funk
<https://www.youtube.com/watch?v=AL818qUDWJM>
- Interview with Greek National Radio, φΛΕPT Program <https://www.ertflix.gr/psychagogia/21sep2020-flert/>
- Ven. SuBul Sunim & Prof. Menas C. Kafatos, Buddhist Broadcast System, Seeking the Truth: looking for the truth in our lives, Part 1, Premiered Sep 8, 2020, <https://youtu.be/bBChU0Yi1O8>, Part 2, Premiered Sep 8, 2020 https://youtu.be/XLyDiO9Z_J4

Articles in Newspapers - (full articles are available on request or can be accessed online)

SCIENTIFIC AMERICAN - COMING TO GRIPS WITH THE IMPLICATIONS OF QUANTUM MECHANICS

The question is no longer whether quantum theory is correct, but what it means
By [Bernardo Kastrup](#), [Henry P. Stapp](#), [Menas C. Kafatos](#) on May 29, 2018

- - [Link](#)
- *Washington Post* (2011) - '[The Death of the Science-Philosophy Dichotomy?](#)'
- Menas C. Kafatos *Huffington Post* Blogs
 - Where Are We Going? A Wandering Scientist Asks ([Link](#))
 - Science or Scientists in the Spotlight? A Wandering Scientist Asks ([Link](#))
 - Do Scientists Abuse Science ([Link](#))
 - Religion is Changing, So Why Not Science ([Link](#))
 - Embrace Change, Enable Dialogue ([Part 1](#)) ([Part 2](#)) ([Part 3](#))
 - The Spookie Mind ([Link](#))
 - Disconnected in an Overconnected World ([Part 1](#)) ([Part 2](#)) ([Part 3](#))
- *Huffington Post/San Francisco Chronicle* Blogs: He contributes with Deepak Chopra and others:
 - Is It 'Bad Science' or a 'Game of Thrones'?
 - Reply to Chris Anderson, We're Halfway There, But...
 - Hawking's Grand Book, But Where Is the Design?
 - Hawking's Grand Book, But Where Is the Design? (Part 2)
 - Scientists and Scholars in the Consciousness Community Weigh in about: Who Are The Enemies of Reason?

- Censorship, Consciousness, Militant Atheists, and Pseudo Science!
- Deepak Chopra: Scientific Proof of God?
- Other blogs include:
 - Do We Really Know What's Real? The Most Optimistic Answer Is Maybe, Posted August 3, 2015, By Deepak Chopra, MD, and Menas Kafatos, PhD
 - Physics' Split Personality: Is the Dark Side Winning?, Posted July 27, 2015, by Menas Kafatos, PhD, Co-authored with Deepak Chopra, MD
 - Why Gravitational Waves Are Red Herrings, Posted February 29, 2016, by Menas Kafatos, PhD, Co-authored with Deepak Chopra, MD and Rudolph E. Tanzi, Ph.D. (Link)
 - If Science Is a Game, Here's a Game-Changer, March 14, 2016, by Deepak Chopra, MD, and Menas Kafatos, PhD ([Read Post](#))
 - How To Get Reality Back On Track, June 27, 2016, by Deepak Chopra, MD, and Menas Kafatos, PhD ([Read Post](#))
 - Hitching a Ride on the Cosmos, posted February 15, 2017, by Deepak Chopra and Menas Kafatos
- SFGATE Posts (For a full list of Articles listed in *SFGate* - [Click Here](#)):
 - Did God Discover the God Particle?
 - A Consciousness Based Science
 - From Quanta to Qualia: What Nature Is Really Telling Us
 - Feel Like a Butterfly, See Like a Bee? - The Mystery of Perception
 - Time to Get Real - The Riddle of Perception (Part 1) (Part 2)
 - Why the Universe Is Our Home - It's Not a Coincidence
 - Your Brain is the Universe (Part 1) (Part 2)
 - Can Reality Set Us Free? The Puzzle of Complementarity (Part 1) (Part 2) (Part 3)
 - Can the Truth Come Back With a Capital ``T``? (Part 1) (Part 2) (Part 3) (Part 4)
 - Thinking Outside the (Skull) Box, (Part 1) (Part 2) (Part 3) (Part 4) (Part 5) (Part 6) (Part 7)
 - What Would God Think of the God Particle (Part 1) (Part 2)
 - Enlightened by Tech Conference
 - What Is Cosmic Consciousness? The Quest for Hidden Reality
 - Hidden Truths Going Beyond Common Sense Reality

News Articles on Wildfires

The wildfire project has received wide publicity and media attention in its 8 months of work, particularly since early May 2013, when it became clear that what we were forecasting (double jeopardy risk of very wet early year yielding rapid brush growth with subsequent drying out and high temperatures, leading to high fire risk) indeed started happening. The tragic 2013 death of 19 firefighters in Arizona brought in a painful way the need to do a lot more to understand wildfires.

- <http://www.jpl.nasa.gov/news/news.php?release=2013-160>
- <https://earthobservatory.nasa.gov/images/144750/understanding-evacuation-patterns-with-social-media>
- <http://www.jpl.nasa.gov/spaceimages/details.php?id=PIA17052>

- <http://blogs.chapman.edu/press-room/2013/05/13/satellites-see-double-jeopardy-for-social-fire-season/>
- <https://news.chapman.edu/2019/12/19/facebook-data-has-implications-for-disaster-planning/>
- <http://phys.org/news/2013-05-satellites-jeopardy-southern-california-season.html>
- <http://photojournal.jpl.nasa.gov/catalog/PIA17052>
- <http://www.sciencedaily.com/releases/2013/05/130513174502.htm>
- <http://spaceinthenews.blogspot.com/2013/05/satellites-see-double-jeopardy-for.html>
- http://www.nasa.gov/topics/earth/features/earth20130513_prt.htm
- <http://articles.latimes.com/2013/may/13/local/la-me-ln-satellites-shows-double-jeopardy-wildfire-danger-20130513>

Interviews on Social Media

Kafatos has been interviewed on social media (Twitter, Facebook, Instagram, Linked in, YouTube). The following is a small sample:

- *SAND (Science & Nonlocality)* The Nonlocal, Entangled, Conscious Universe: From the Spookiness of Limited Mind to the Undivided Wholeness of Reality - Link
- *SAND (Science & Nonlocality)* Exploring Non-local Consciousness - Link
- Time, Space and Matter with Menas Kafatos - Link
- SAGES & SCIENTISTS with Deepak Chopra
- The Riddle of Consciousness- Part 1 - Link
- Space, Time and Reality - Part 2 - Link
- The Gap Between Thoughts - Part 3 - Link
- Is God a Mathematician? | ASK DEEPAK! - Link
- SPACE-TIME! Deepak & Friends - Link
- What is the source of the universe? | ASK DEEPAK! - Link
- What is Complementarity? (with Menas Kafatos) - Link
- Saebasi The 15 min. that Changes The World, CBS Aired: 17 February, 2014 (TEDx of Korea) - Link
- Interview with EBS in Seoul - Link
- Lecture at Berkeley - Extending Quantum Reality: Potential Framework Utilizing Generalized Principles - Link
- "Seeking the Sacred in Science" with Jay Kumar, Fish Interfaith Center, Chapman University - Link
- Meeting Buddhist Master Cheng Yen in Taipei, Taiwan. We drew parallels between the principles of Buddhism and quantum mechanics. The message promoted in dialogue: Spirituality and science are for serving the people. Consciousness is ultimate Reality. - Link
- Interview in Taipei by Dr. Chi-Ming Peng, CEO of WeatherRisk Explore, volunteer for Tzu Chi Foundation. Menas discussed global change and interdisciplinary science, quantum theory and Consciousness, Buddhism and science. - Link
- Athens Megaron Lecture, Science, Consciousness and Human: How Modern Science Meets Ancient Philosophy - Link
- Science Animated - Video & Social Media Promotion, With Sci Ani branding:
https://www.dropbox.com/s/wbh3ybiuhplysuh/Menas%20Kafatos%20Final%20Animation_with_LOG

[OS.mp4?dl=0](#), Without Sci Ani branding:

<https://www.dropbox.com/s/rceb6gmixzaath2/Menas%20Kafatos%20Final%20Animation.mp4?dl=0>,

Link to the high-resolution images/stills:

<https://www.dropbox.com/sh/i56c81t07ps8778/AAADDTGfnBiVYR3MPd-ZXvZoa?dl=0>

Book Signings and Major Public Lectures

Book signings involve three recent, successful books, one of them NYT Best Seller, Chopra, D., Kafatos, M.C. (2017) *You Are the Universe (YATU)* Penguin, Harmony, Random House.

The other two are Kafatos, M.C. (2016) *Living the Living Presence (LLP)* (in Korean) Miruksa Press: Seoul, Korea. and Kafatos, M.C. (2017) *Living the Living Presence (Βιώνοντας την Ζωντανή Παρουσία, in Greek) (LLP)* Μέλισσα Publishers: Athens.

- Book signing: **YATU**, Marina Del Rey, May 6, 2017.
- Book signing: Deepak Chopra and Menas C. Kafatos, **YATU**, Chapman, May 6, 2017.
- Book signing: **YATU**, St. Sophia's Huffington Center, May 7, 2017.
- Acropolis *Museum*: "**LLP**: The Laws of the Universe in the Present" ("Βιώνοντας τη Ζωντανή Παρουσία: Οι Νόμοι του Σύμπαντος στο Παρόν", in Greek) and Book Signing, Athens, Greece, June 9, 2017. **200 participants**, general public.
- Titania Hotel: "**LLP**: The Clear Mind" ("Βιώνοντας τη Ζωντανή Παρουσία: Ο Καθαρός Νους", in Greek) and Book Signing, Athens, Greece, June 11, 2017. **60 participants**
- *Book Concert* on **LLP** was held at the Gangnam culture center in Seoul, Korea on November 29, 2016. Dr. Keun-Hang Yang organized and hosted this event for the book signing as well as fund raising for *Mulmangcho Foundation* in Seoul. **100 participants**, including the former president of Korea University. A few newspaper companies interviewed and wrote articles on the event. http://www.sundaytimes.kr/bbs/board.php?bo_table=B04&wr_id=728 *Mulmangcho Foundation* is a non-governmental organization (NGO), Seoul, Korea. It was founded in 2012 to help North Korea refugees.
- *Book Signing & Art Concert*, Huffington Center in Los Angeles on January 27, 2017. Dr. Keun-Hang Yang organized the event, with **80 participants**, including 3 Chapman students. Event was broadcast by YTN Radio, Sunday Journal USA, KBC-TV, and Glin-TV.
- Book signing, Greek Version, *You Are the Universe*, Ianos Bookstore, Athens, Greece, June 8, 2018
- Saivism and the Significance of Mahasivaratri, 6 Live Sessions, March 7-10 2021 - Online
- Live reading, Theatron of the Americas Honors Greece's 200 Years of Independence, March 24, 2021 - Online
- Presentation, Sivananda Ashram: Heal your Heart, Free Your Mind through Mantra, Meditation, Japa and Sacred Sound, July 7, 2020, Bahamas - Online

ADDENDUM

Ongoing and Future Collaborations

ECHO collaborates with and has been funded through Korean institutional research programs. We are exploring potential sources of funding from NASA Headquarters. As such, we are developing strategies and collaborations in the new research environment, based on our strengths. Strategies for identifying

sources of funding and proposals to the federal or State governments are being explored, opportunities with different university stakeholders (like LMU) and international partners (Greece, Italy, Japan, Korea, China and Vietnam).

Building on current & past work, explore, possibly develop Earth system projects & collaborations, with NASA, Greek, Korean, Vietnamese and other countries' institutions using the foundation of fundamental geophysical and climatic modeling, together with satellite observations from local, regional to global scales. Work leading to new advances in the science that enable practical applications in natural hazard problems, ecosystems & societal responses, including health.

Kafatos continues to attend national and international meetings to give invited presentations, in person or virtually. Kafatos is working at different levels and exploring plans for the formation of virtual institute(s) among several universities (possibly UAZ, CU, SFSU, LMU, CIIS etc.) to work on common areas of interest such as: reality, mind and the cosmos; environmental science and society, etc. Current national and international collaborations present opportunities that can be further explored and pursued.

Study interdisciplinary links and relationships in areas affecting OC, LA and California in general, such as health risks from corona virus; hazards such as earthquakes; wildfires and environmental challenges. Many of these areas can be approached with common scientific approaches, data access and integration, similar on-line technologies, to e.g. provide information on population movements, impacts and resilience.

Reaching out to diverse communities & the general public, further explore and develop practical steps for public awareness, connection with understanding of one's nature for the individual person and groups, emphasizing importance for young people. Using social media ways to reach wide audiences, strive for accessing, from several thousand to perhaps as many as 80+ thousand.

Goals for the future include: Explore deeper connection in philosophical systems, Platonism, Saivism, Korean Seon Buddhism with science, utilizing QM, mathematical relations, alphabets and sounds relationships & limits of knowledge (e.g., Gödel). Levels of dialogue to be developed between the disciplines in papers & talks. Writing a new book manuscript *Science, Reality & Everyday Life*, to be published by DK Publishers.

Collaborating Institutions (partial list)

Ewha Women's University: Since its foundation in 1886 as "Ewha Haktang," Korea's first modern educational institution for women, Ewha has been a driver of change for the women of Korea. Ewha is a pioneer in higher education for women in Korea that has produced female leaders in every field, at every level, while contributing to academic and social development.

<https://www.ewha.ac.kr/mbs/ewhaen/index.jsp>

Chungnam National University (CNU), founded in 1952, has been cultivating the best minds in Korea under the educational motto of "Creativity, Development, and Service to the Community." CNU has been performing a key role as the most prestigious national university in the central region of Korea.

<http://plus.cnu.ac.kr/html/en/>

Korea University: The university was founded in 1905. Its Universitas 21 program that was founded in 1997 currently boasts 21 member universities in twelve different countries and territories. It works to enhance cooperation among member universities and promote opportunities that cannot be easily achieved by any single institution alone. It remains the first and only University member from South Korea. In 2009, KU hosted a symposium and the U21 Presidents' Annual Meeting and pledged its commitment to a joint PhD program among fourteen universities. <https://www.korea.edu>

The Institute of Remote Sensing and Digital Earth (RADI) under the Chinese Academy of Sciences (CAS) was founded in September 2012 through the merging of the Institute of Remote Sensing Applications (IRSA) and the Center for Earth Observation and Digital Earth (CEODE). RADI is involved in several projects supported by the National Natural Science Foundation of China and major projects for international cooperation and exchanges. Through these efforts, RADI has committed itself to the nation's S&T advancement and greatly strengthened its S&T innovation capacity. <http://english.radi.cas.cn>

L'BESTE USA, INC. was established on September 8, 2015 as the U.S. Subsidiary company of L'BESTE GAT LTD. in South Korea. The mother company, L'BESTE GAT LTD. was founded in 1997 in order to build a green environment for the country that manufactures various civil, architectural, functional chemicals and electronic materials. L'BESTE GAT LTD. performs its leading roles in eco-friendly chemical industries. Joint programs are being explored. <http://lbesteusa.com>

The Hanmi Family Counseling Center (HFCC) was established in 1990, and is a private, non-profit service agency supported by individuals, businesses, private foundations, churches, and various community organizations. The HFCC provides programs to meet the expending needs of the community through various services such as counseling, information/referral, mentoring for youth, support for interest group, and community education seminars and workshops. <http://www.hanmihope.org/web/>

Miraein Co., Ltd. is an enterprise in South Korea, with the main office in Seoul. It operates in the Real Estate industry. The company was established on August 10, 1996. We are exploring joint programs for employees' well-being. <http://miraein.co.kr/web/cate01/page01.php>

The Symi Symposium, which has been led since its inception by the former Greek Prime Minister George A. Papandreou, brings together leading intellectuals, politicians, Nobel laureates, entrepreneurs, diplomats, scientists, and activists to discuss some of the most important issues of our times. It was first held in 1998 on the island of Symi, which has lent its name to our retreat ever since. Kafatos has participated in invited lectures and workshops with international students attending Symi. <https://symisymposium.org>