BIOS

TSC 2004 CONFERENCE CHAIRS

STUART HAMEROFF

Stuart Hameroff Co-Founder, Director, Center for Consciousness Studies; Co-Chair, The Science of Consciousness; Professor Emeritus, Departments of Anesthesiology and Psychology, U of Arizona, Stuart Hameroff MD is a clinical anesthesiologist and researcher on how the brain produces consciousness, and how anesthetics act to erase it. In medical school in the early 1970s, Hameroff became interested in consciousness, and in protein structures called microtubules inside brain neurons which he came to believe processed information supporting consciousness. In the mid- 1990s he teamed with Sir Roger Penrose to develop the controversial 'Orch OR' theory in which consciousness derives from "orchestrated" ("Orch") microtubule quantum vibrations linked to processes in spacetime geometry, the fine scale structure of the universe, leading to "Penrose objective reduction" ("OR", hence "Orch OR"). And he has further proposed the 'microtubule quantum vibration' theory of anesthetic action. Hameroff organizes the well-known conference series 'The Science of Consciousness', has written or edited 5 books and over a hundred scientific articles, and appeared in films and various TV shows about consciousness. With University of Arizona colleagues Jay Sanguinetti, John JB Allen and Shinzen Young, Hameroff is developing transcranial ultrasound ('TUS') for treatment of mental and cognitive dysfunction (TUS may resonate endogenous megahertz vibrations in brain microtubules). Penrose-Hameroff Orch OR is one of a group of major theories of consciousness in the Templeton World Charity Foundation project 'Accelerating Research on Consciousness' and is currently being tested experimentally. (Jan 2024 New Scientist Feature Cover on Quantum Consciousness, G. Musser) (Plen 12)

F_Quantum Consciousness (READ ONLY)_20 jan New Scientist Jan 2024.pdf

GEORGE MASHOUR

George A. Mashour is an anesthesiologist and NIH-funded neuroscientist at the University of Michigan Medical School, where he serves as the Robert B. Sweet Professor and Chair of Anesthesiology. He founded and currently directs the Michigan Psychedelic Center, which is multidisciplinary and spans the University of Michigan. (Plen 6)

2024 TSC Keynote Speakers

EARL K. MILLER

Earl Keith Miller is a cognitive neuroscientist whose research focuses on neural mechanisms of cognitive, or executive, control. Earl K. Miller is the Picower Professor of Neuroscience with the Picower Institute for Learning and Memory and the Department of Brain and Cognitive Sciences at Massachusetts Institute of Technology. He is the Chief Scientist and co-founder of SplitSage. Earl Miller received a Bachelor of Arts degree (summa cum laude, with honors) in psychology from Kent State University in 1985, Master of Arts degree in psychology and neuroscience from Princeton University in 1987, and a PhD in psychology and neuroscience from Princeton University in 1990. In 2020, Earl Miller was awarded an honorary doctorate (Doctor of Science, honoris causa) from Kent State University. (Keynote/Plen 2)

SUSAN SCHNEIDER

Susan Schneider is the Director of the Center for the Future Mind at Florida Atlantic University, the former NASA/Blumberg Chair in Astrobiology at NASA and the former Distinguished Scholar Chair at the Library of Congress. She works with Congress on AI policy and co-directs the MPCR AI Lab at FAU. She writes about the fundamental nature of the self and mind, especially from the vantage point of issues in philosophy, artificial intelligence, cognitive science, and astrobiology. Her work has been featured on shows on PBS, The History Channel, Fox, CNN and the BBC and featured in print venues such as The New York Times, the MIT Technology Review, Science, the Financial Times, The Wall Street Journal, Nautilus, Scientific American, the Washington Post and more. Schneider is the author of Artificial You: AI and the Future of Your Mind, a 120-page philosophical primer on what AI can and cannot achieve, and an academic book on the computational nature of the mind, The Language of Thought: a New Philosophical Direction (2011, MIT). She is currently working on a book on the future of intelligent systems for WW Norton and another on "chatbot epistemology" (with Mark Bailey and Michael Lynch). (Keynote/Plen 5)

ANIRBAN BANDYOPADHYAY

Anirban Bandyopadhyay PH.D. Materials and Nano-architectronics, MANA, National Institute for Materials Science, NIMS, Tsukuba, Japan Anirban Bandyopadhyay is Principal Research Scientist (NIMS), Tsukuba. He earned his Ph.D. in Supramolecular Electronics at the Indian Association for the Cultivation of Science (IACS), Kolkata, 2005. From 2005 to 2008 he was ICYS research fellow at the ICYS, NIMS, Japan, and worked on the brain-like bio-processor building. In 2008, Anirban joined as a permanent scientist at NIMS, working on the cavity resonator model of human brain and design-synthesis of brain-like organic jelly. From 2013 to 2014 he was a visiting scientist at the Massachusetts Institute of Technology (MIT), USA. Awards include: Hitachi Science and Technology award 2010, Inamori Foundation award 2011–2012, Kurata Foundation Award, Inamori Foundation Fellow (2011–) and Sewa Society international member, Japan. (Keynote/Plen 8) www.nanobraintech.com

DANTE LAURETTA

Dante Lauretta, CCS External Adviser, UArizona, Regents Professor, Planetary Science & Cosmochemistry, University of Arizona Lunar & Planetary Laboratory. Dante Lauretta is principal investigator of the OSIRIS-REx mission and a regents professor of planetary science at the University of Arizona's Lunar and Planetary Laboratory. His research interests focus on the chemistry and mineralogy of asteroids and comets, and he is an expert in the analysis of extraterrestrial materials, including asteroid samples, mete-orites and comet particles. Dr. Lauretta fosters the advancement of the next generation of scientists, engineers, and other space leaders through mentorship and taught coursework which apply his expertise in planetary science and spacecraft mission design & implementation.

Dr. Lauretta heads the OSIRIS-REx research team at UArizona working on this mission, which has included more than 100 undergraduate and graduate students. This project will help ensure that the University of Arizona remains at the forefront of planetary exploration for the next decade. (Keynote/Plen 11)

The Alfie Norville Gem & Mineral Museum is now one of only three places in the world where the public can see a piece of the asteroid Bennu, collected during NASA's University of Arizona-led OSIRIS-REx mission. A pebble scooped from an asteroid is now on display at UArizona museum

Plenary Speakers (by last name)

HARALD ATMANSPACHER

Harald Atmanspacher, Physicist, em. member of the Chair of Philosophy at ETH Zurich and faculty member at University of Essex. After his PhD in physics at Munich University (1986) he worked as a research scientist at the Max-Planck-Institute for Extraterrestrial Physics at Garching until 1998, as head of the theory division of the Institute for Frontier Areas of Psychology at Freiburg until 2014, and in the executive board of the Collegium Helveticum (ETH Zurich) until 2020. His fields of research are the theory of complex systems, conceptual and theoretical aspects of quantum theory, and mind-matter relations from interdisciplinary perspectives. He is the president of the Society for Mind-Matter Research and editor of its journal Mind and Matter. https://www.mindmatter.de/about/board.html. (Plenary 10)

Note: for those arriving early. "The Society for Mind-Matter Research (www.mindmatter.de/index.html) will offer a workshop for members on April 21, the day before the TSC conference, from 9am to 5pm, featuring a keynote by Stuart Hameroff and a number of other contributions by members. Interested in attending? Write to **society@mindmatter.de** for further information. Membership available. Reservations encouraged.

ANDRE BASTOS

André M. Bastos, PhD, Principle Investigator. Dr. Bastos received his PhD from the University of California, Davis (2013) where he worked with Drs. Ron Mangun and Marty Usrey on thalamocortical communication. During his PhD, Dr. Bastos was a Fulbright scholar in the laboratory of Dr. Pascal Fries at the F.C. Donders Center for Cognitive Neuroimaging in Nijmegen, The Netherlands (and later at the Ernst Strüngmann Institute in Frankfurt, Germany). His studies with Dr. Fries focused on distinct oscillatory frequencies used in feedforward vs. feedback cortical communication. He was also a visiting student with Dr. Karl Friston at Wellcome Trust Centre for Neuroimaging at University College London, where he first got interested in the theory of predictive coding. André then went on to work as a postdoctoral associate with Dr. Earl Miller at MIT and Dr. Nancy Kopell at Boston University where he used large-scale neuronal recordings to gain insight into predictive processing. He joined the faculty of Vanderbilt University in 2021 as an Assistant Professor of Psychology and member of the Vanderbilt Brain Institute (VBI). (Plen 4)

SUSAN BLACKMORE

Susan Blackmore is a psychologist, lecturer and writer best known for her book The Meme Machine (1999) and the textbook **Consciousness: An Introduction** with her daughter Emily Troscianko. The 4th Edition is published on April 19th this year and there will be a book signing at the TSC Conference. She is a Visiting Professor at the University of Plymouth, UK. Her research interests include memes, near-death and out-of-body experiences, free will, meditation, and altered states of consciousness. She has written more than sixty academic papers, a hundred contributions to books, and her work has been translated into twenty other languages. Susan has practised Zen for forty years and plays in a samba band. (Plen-12) (C-5) (Workshop Education)

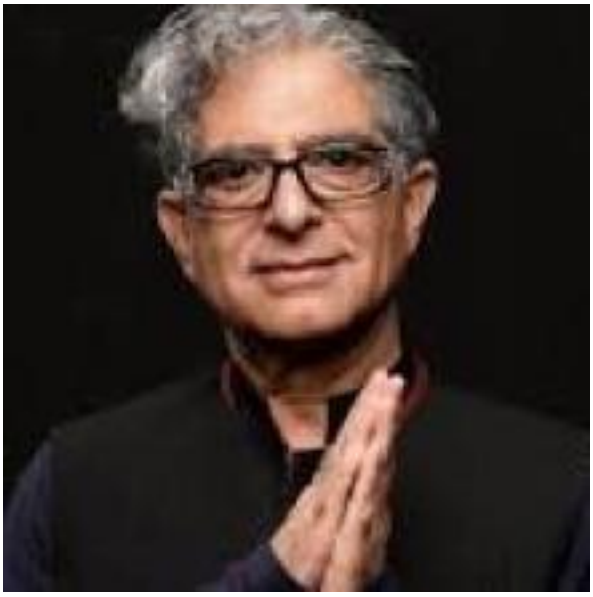
JEROME BUSEMEYER

Jerome Busemeyer previously was a Full Professor at Purdue University before 1997, and now is Distinguished Professor in Psychological and Brain Sciences, Cognitive Science, and Statistics at Indiana University-Bloomington. His research has been funded by the National Science Foundation, and the National Institute of Mental Health, and he served grant review panels for these agencies. He was the Manager of the Cognition and Decision Program at the Air Force Office of Scientific Research in 2005-2007. He has published five books in decision and cognition, and over 100 journal articles across disciplines. He served as the Chief Editor of Journal of Mathematical Psychology, Associate Editor of Psychological Review, and he was the founding Chief Editor of Decision. He won the prestigious Warren medal from the Society of Experimental Pschologists in 2015, and became a fellow of the Cognitive Science Society and the American Academy of Arts and Sciences in 2017. During his early career, he became well known for the development of a dynamic and stochastic model of human decision making called decision field theory. Later, he was one of the pioneers to develop a new approach to cognition based on mathematical principles from quantum theory. In 2012, Cambridge University Press published his book with Peter Bruza introducing this new theory applying quantum probability to model human judgment and decision-making. A second edition of that book will appear in 2024. Jerome Busemeyer - Distinguished Professor and Provost Professor, Psychological and Brain Sciences, Indiana University. Fellow, American Academy of Arts and Sciences. Research Interest: Mathematical models of human judgment and decision-making behavior. (Plen 7)

DAVID CHALMERS

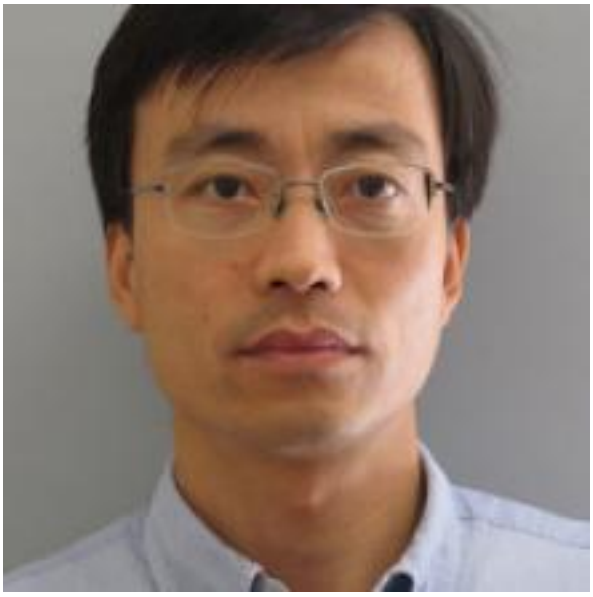
David Chalmers is University Professor of Philosophy and Neural Science and co-director of the Center for Mind, Brain, and Consciousness at New York University. He is the author of The Conscious Mind (1996) and of Reality+: Virtual Worlds and the Problems of Philosophy (2022). Here's an excerpt. He is known for formulating the "hard problem" of consciousness, for the idea of the "extended mind," and for the thesis that virtual reality is genuine reality. David Chalmers was featured in the New York Times Magazine, Dec. 10, 2021 - Interview with David Marchese - 'Can We Have a Meaningful Life in a Virtual World' - http:// consc.net/ David is Former Director and Founder, Center for Consciousness Studies, University of Arizona. Faculty positions included, UC Santa Cruz, University of Arizona, Australian National University. Ph.D., Philosophy and Cognitive Science, Indiana University; McDonnell Fellow at Washington University; Rhodes Scholar in Pure Maths and Computer Science at the University of Adelaide in Australia. David Chalmers is Co-Founder, Center for Consciousness Studies, Tucson. Chalmers's writings include: Philosophy of Mind; The Conscious Mind; The Character of Consciousness; Constructing the World; Mind and Consciousness; Facing Up to the Problem of Consciousness. (Plen 12)

DEEPAK CHOPRA



DEEPAK CHOPRA MD, FACP, FRCP founder of the Chopra Foundation, a non-profit entity for research on well-being and humanitarianism, and Chopra Global, a modern-day health company at the intersection of science and spirituality, is a world-renowned pioneer in integrative medicine and personal transformation. Chopra is a Clinical Professor of Family Medicine and Public Health at the University of California, San Diego and serves as a senior scientist with Gallup Organization. He is also an Honorary Fellow in Medicine at the Royal College of Physicians and Surgeons of Glasgow. He is the author of over 95 books translated into over forty-three languages, including numerous New York Times bestsellers. For the last thirty years, Chopra has been at the forefront of the meditation revolution and his upcoming book, Quantum Body (Harmony Books, 12/5/23) delves into the innovative world of quantum science and shows how unlocking its secrets can revolutionize how we live and age – and, ultimately, how we can eradicate disease. TIME magazine has described Dr. Chopra as “one of their top 100 most influential people.” www.deepakchopra.com (Plen 3)

PULIN GONG



Pulin Gong, University of Sydney, Associate Professor, School of Physics. Dr Pulin Gong is interested in better understanding the self-organizing mechanisms of spatiotemporal dynamics of neural circuits and the principles underlying how these dynamics implement neural computation. (Plen 4)

SANTOSH A. HELEKAR

Santosh A. Helekar, MD, PhD is a neuroscientist at the Houston Methodist Research Institute (HMRI). He has a medical degree from the University of Bombay and a Ph.D. in Neuroscience from Baylor College of Medicine. Presently, he is the Director of Translational Biomagnetics and Neurometry Program and an Associate Professor of Psychiatry and Neurosurgery at HMRI and of Neuroscience at Weill Cornell

Medical College. His current research focuses on measuring a consciousness-related biophysical effect that was recently discovered using a noninvasive device called the Sentiometer invented by him, and on characterizing it using another device called the Qualiagraph being developed in his laboratory. (Plen 13)

DONALD HOFFMAN

Donald Hoffman received a PhD in Computational Psychology from MIT and is a Professor Emeritus of Cognitive Sciences at the University of California, Irvine. He is an author of over 100 scientific papers and three books, including The Case Against Reality: Why Evolution Hid the Truth from Our Eyes (2019), and Visual intelligence: How we create what we see (1998). He received a Distinguished Scientific Award of the American Psychological Association for early career research, the Rustum Roy Award of the Chopra Foundation, and the Troland Research Award of the US National Academy of Sciences. His writing has appeared in Scientific American, New Scientist, LA Review of Books, and Edge, and his work has been featured in Wired, Quanta, The Atlantic, Ars Technica, National Public Radio, Discover Magazine, and Through the Wormhole with Morgan Freeman. He has a TED Talk titled "Do we see reality as it is?" @donalddhoffman (Plen 3)

ZIRUI HUANG

Zirui Huang Ph.D, is a Research Assistant Professor in the Department of Anesthesiology and a member of the Center for Consciousness Science at the University of Michigan Medical School. He has a multidisciplinary background including psychology, biology, cognitive neuroscience and neuroimaging. His primary research interest lies in investigating the neural substrates of consciousness. He studies the mechanistic role of large-scale brain networks in conscious cognition and its alteration by means of pharmacologic, neuropathologic and psychiatric manipulations of consciousness using functional MRI. He earned his Ph.D. in Cognitive Neuroscience from the Institute of Psychology, Chinese Academy of Sciences. After his Ph.D., he continued his research for two postdoc periods at the University of Ottawa and the University of Michigan. To-date, he has published 45+ scientific articles. Among those, 20+ first/co-first author articles that have been published in Science Advances, Cell Reports, Neuroscience & Biobehavioral Reviews, The Journal of Neuroscience, Cerebral Cortex, NeuroImage, etc. He also serves as Ad Hoc Reviewer for prestigious scientific journals, such as Trends in Cognitive Sciences, Advanced Science, Molecular Psychiatry, The Neuroscientist, etc. Media interviews: The Scientist: **https://www.the-scientist.com/news-opinion/alternate-activation-oftwo-b…** (Plen 13)

CHRISTOF KOCH

Christof Koch, Ph.D., Chief Scientist and President, Allen Institute for Brain Science, Seattle, Washington and Chief Scientist of the MindScope Program. Christof received his baccalaureate from the Lycée Descartes in Rabat, Morocco, his B.S. and M.S. in physics from the University of Tübingen in Germany

and his Ph.D. from the Max-Planck Institute for biological Cybernetics in 1982. Subsequently, he spent four years as a postdoctoral fellow in the Artificial Intelligence Laboratory and the Brain and Cognitive Sciences Department at the Massachusetts Institute of Technology. From 1987 until 2013, Koch was a professor at the California Institute of Technology (Caltech) in Pasadena, from his initial appointment as Assistant Professor, Division of Biology and Division of Engineering and Applied Sciences in 1986, to his final position as Lois and Victor Troendle Professor of Cognitive & Behavioral Biology. Christof joined the Allen Institute for Brain Science as Chief Scientific Officer in 2011 and became President in 2015. Christof's passion are neurons – the atoms of perception, memory, behavior and consciousness – their diverse shapes, electrical behaviors, and their computational function within the mammalian brain, in particular in neocortex. The Allen Institute for Brain Science is engaged in a major effort to identify all the different types of neurons in the brains of mice and humans – the cell census effort. Christof discovered that in vivo cortical neurons do not integrate over large number of small inputs given their spiking variability, how neurons can multiply, the relationship between intra- and extra-cellular potential, and how this gives rise to the local field potential and the large-scale current sinks and sources and how weak extracellular fields can entrain spiking activity via ephaptic effects. He postulated the attentional saliency map hypothesis for biological and computer vision according to which one or more topographic organized spatial maps summarize bottom-up salient information in the visual system, he co-discovered, with Itzhak Fried, an highlevel, invariant and abstract single neuron representation of familiar individuals and objects in the human medial temporal lobe (the so-called "Jennifer Aniston" or concept neurons) and developed the 'continuous flashed suppression' masking technique. In collaboration with Francis Crick, he initiated the modern search for the neuronal correlates of consciousness, a systematic experimental program to identify the minimal bio-physical mechanisms jointly sufficient for any one specific conscious percept. In collaboration with Giulio Tononi, he codeveloped the Integrated Information Theory of consciousness. Brain and Consciousness, Christof Koch, Ph.D., Mindscope Program, Allen Institute, Tiny Blue Dot Foundation. (Plen 12 & Symposium)

STEVEN LAUREYS

Steven Laureys MD PhD, Canada Excellence Research Chair, CERVO Brain Research Centre, Quebec, Canada, FNRS Research Director, University of Liège, Belgium;
Harvard https://www.drstevenlaureys.org/

Award-winning brain scientist, world-renowned neurologist, and international bestselling author, Steven has conducted groundbreaking research into the human mind for more than 25 years. He explores the human mind using the latest technologies assessing consciousness and the power of the mind in meditation, sleep, coma, near-death experiences, psychedelics, hypnosis and dreamlike states. With his team, he has also studied the brains of astronauts, top-athletes, Buddhist monks (including Matthieu Ricard and lama Zeupa) and entrepreneurs. Prof Laureys has authored no less than an impressive 540+ scientific papers, and has an H-index of 135+. Furthermore, he has published several books, including The Neurology of Consciousness, and popular books, such as the international bestseller, "The No-Nonsense Meditation Book" (translated in 15+ languages). Steven is father of five and currently resides much of the time in Canada. He is widely appreciated as an approachable brain expert, science populariser and speaker (including 5 popular TEDx talks). Steven's work has been featured extensively in media such as TIME magazine, the New York Times, FORBES, the Guardian, BBC, CNN and National Geographic. (Plen 1)

Tanya Marie Luhrmann

Tanya Marie Luhrmann is the Albert Ray Lang Professor of Anthropology at Stanford University, with a courtesy appointment in Psychology. Her work focuses on the edge of experience: on voices, visions, the world of the supernatural and the world of psychosis. She has done ethnography on the streets of Chicago with homeless and psychotic women, and worked with people who hear voices in Chennai, Accra and the South Bay. She has also done fieldwork with evangelical Christians who seek to hear God speak back, with Zoroastrians who set out to create a more mystical faith, and with people who practice magic. She uses a combination of ethnographic and experimental methods to understand the way people feel their thoughts and imagine their minds in different social settings, and what follows. At the heart of the work is the question of how things come to feel real to people. She was named to the American Academy of Arts and Sciences in 2003, received a John Guggenheim Fellowship award in 2007 and elected to the American Philosophical Society in 2022. When God Talks Back was named a NYT Notable Book of the Year and a Kirkus Reviews Best Book of the Year. It was awarded the $100,000 Grawemeyer Prize for Religion by the University of Louisville. She is also the author of Persuasions of the

Witch's Craft, The Good Parsi, Of Two Minds, When God Talks Back, Our Most Troubling Madness, and How God Becomes Real, and is currently at work on a book entitled Voices. (Plen 6)

PIETER-JAN MAES

Pieter-Jan Maes research (IPEM, **www.asil.ugent.be**, Ghent University, Belgium) is situated in the field of systematic musicology, focusing on embodied and social interaction with music. Through empirical music research, I aim to better understand the dynamical coordination processes observed in bodily activation (including the brain) of humans engaged in music performance and experience. I consider the study of coordination processes as a gateway towards a better understanding of the powerful (inter)subjective experiences that music can evoke. In my research, I explore emerging technologies of extended reality (XR) as innovative methodological tools, both on the level of stimuli creation (simulation of real-life immersive environments, or the creation of "impossible" stimuli), as well as on the level of quantitative measurement of behaviour and (neuro)physiological responses. Further, this research is connected in collaborative artistic-creative research in which we aim to explore the possibilities of XR technologies to innovate the cultural-creative sector with new forms of musical interaction and expression. (Plen 7)

ALYSSON MUOTRI

Alysson Renato Muotri is a Brazilian researcher from the University of California, United States, where he has been working since 2008. He is also the director of the Stem-Cell Program of the UCSD. Dr. Alysson R. Muotri, a professor in the Departments of Pediatrics and Cellular & Molecular Medicine at the University of California, San Diego, is focusing his research on solving one of life's greatest mysteries: What is it that makes us uniquely human? Research tells us that one of the most influential characteristics of modern humans is our sophisticated brains, and all of the abilities that its complexity grants us. Our unique social brains are one of the key distinguishing factors between humans and other primates. We are even very different from our closest relatives, the Neanderthals, whose brains were limited in their ability to create technology, art, imagination and overall culture. Dr. Muotri is studying the brain from an evolutionary and developmental perspective, differentiating stem cells to recreate "brain organoids" in the controlled setting of a lab. (Plen 14)

HARTMUT NEVEN

Hartmut Neven, Google Quantum AI - is an Engineering Director at Google. He is the founder and manager of the Quantum Artificial Intelligence lab. The objective of the lab is to fabricate quantum processors and develop novel quantum algorithms to dramatically accelerate computational tasks for machine intelligence. Previously, Hartmut was head of the Visual Search team. His team developed the visual search service which today is used by a large number of Google products including Image Search, Google Photos, YouTube, Street View and Google Goggles. His teams won a number of competitions designed to establish the best visual recognition software for faces (FERET 1996, FRVT 2002), objects (ImageNet 2014) and text (ICDAR 2013). Hartmut was also a co-founder of project Glass and led the team that built the first prototype. Prior to joining Google, Hartmut started two computer vision companies, the second one was acquired by Google in 2006. Hartmut obtained his Ph.D. in 1996 with a thesis on "Dynamics for vision-guided autonomous mobile robots". Then he became a research professor for computer science and theoretical neuroscience at the University of Southern California. (Plen 14)

CLAUDIA PASSOS

Claudia Passos-Ferreira is Assistant Professor of Bioethics. She studied psychology at the Rio de Janeiro State University and earned her MA and Ph.D. in the program of Human Sciences and Health Sciences in Public Health there. She obtained a second Ph.D. in Philosophy at the Federal University of Rio de Janeiro in Brazil. Passos-Ferreira has published on philosophy, psychology, and neuroethics. She has collaborated in crosscultural research on moral development and social cognition (on topics such as empathy, fairness, ownership, intersubjectivity). She has published a book on Freud and mental causation. In philosophy of mind, she has published on self-knowledge, introspection, and external mental content. Passos-Ferreira's current research program focuses on the development of consciousness, including what theories of consciousness say about infant consciousness and machine consciousness, and how these theories shed light on ethical issues. Prior to joining NYU, Passos-Ferreira was a Postdoctoral Research Fellow at Federal University of Rio de Janeiro with the Ethics and Biotechnologies project., and a Postdoctoral Research Fellow at the State University of Rio de Janeiro with the Ecological Mind and Self-Consciousness project. Earlier in her career, she was awarded a Residency Scholarship from the Brazilian Health Ministry and she received clinical training in Child-Adolescent Mental Health and Mental Health. She has worked as clinical psychologist in private practice and public hospitals as well in Brazil. (Plen 1)

SIR ROGER PENROSE

SIR ROGER PENROSE University of Oxford – Nobel Laureate Emeritus Rouse Ball Professor of Mathematics, Emeritus Fellow, Wadham College University of Oxford United Kingdom Roger Penrose was born, August 8, 1931 in Colchester Essex UK. He earned a 1st class mathematics degree at University College London; a Ph.D. at Cambridge UK, and became assistant lecturer, Bedford College London, Research Fellow St John's College, Cambridge (now Honorary Fellow), a post-doc at King's College London, NATO Fellow at Princeton, Syracuse, and Cornell Universities, USA. He also served a 1-year appointment at University of Texas, became a Reader then full Professor at Birkbeck College, London, and Rouse Ball Professor of Mathematics, Oxford University (during which he served several ½-year periods as Mathematics Professor at Rice University, Houston, Texas). He is now Emeritus Rouse Ball Professor, Fellow, Wadham College, Oxford (now Emeritus Fellow). He has received many awards and honorary degrees, including knighthood, Fellow of the Royal Society and of the US National Academy of Sciences, the De Morgan Medal of London Mathematical Society, the Copley Medal of the Royal Society, the Wolf Prize in mathematics (shared with Stephen Hawking), the Pomeranchuk Prize (Moscow), and one half of the 2020 Nobel Prize in Physics, the other half shared by Reinhard Genzel and Andrea Ghez. He has designed many non-periodic tiling patterns including a large paving at entrance of Andrew Wiles Mathematics Building, Oxford, and the Transbay Center, San Francisco, California. Sir Roger is widely acclaimed for fundamental advances in understanding the universe. His 2020 Nobel Prize in Physics was bestowed for showing that black holes are robust predictions of Einstein's theory of general relativity. Roger has also proposed a solution to the measurement problem in quantum mechanics ('objective reduction', 'OR'), which he suggests is also the origin of consciousness, leading to a theory of brain function ('orchestrated objective reduction', 'Orch OR'). And Roger's concept of Conformal Cyclic Cosmology ('CCC') posits a serial, eternal universe, with the Big Bang preceded by a previous aeon which had its own Big Bang, that aeon preceded by another and so on. (Plen 13)

DIMITRIS PINOTSIS

Dimitris Pinotsis, PhD (PI) is a theoretical neuroscientist with a PhD in Mathematics and an MSc in Theoretical Physics from the University of Cambridge in England where he worked with Thanasis Fokas. After graduating, he published more than fifteen papers in mathematics and physics journals and then decided to pursue a career in neuroscience, his true passion. Dimitris worked with Peter Grindrod and then spent six and a half years at University College London (UCL) working with Karl Friston in machine learning and developing mathematical methods for the analysis of brain data; then continued at the Massachusetts Institute of Technology (MIT), where he worked with Earl Miller on using predictive coding and deep neural networks to address fundamental questions in cognitive neuroscience. In 2018, he joined the Center for Mathematical Neuroscience and Psychology at City— University of London as an Assistant Professor (Lecturer). He is now an Associate Professor (Reader) at the same university and a Research Affiliate at MIT's Brain and Cognitive Sciences Department. Dimitris has received over 10 Fellowships from Cambridge Isaac Newton Trust, Onassis Foundation, NATO, Bernstein Organization and others. He is also the recipient of several awards including an OCNS Award, a Smith-Rayleigh Prize of the University of Cambridge and a Poincare Institute Award. Dimitris' research has been funded by US Air Force Office of Scientific Research, Picower Innovation Fund, UKRI, Innovate UK, Gambling Commission, EPSRC and the Wellcome Trust. It spans diverse areas including machine learning, the analysis of big data in neuroimaging, theoretical neurobiology and nonlinear systems in mathematical physics. Principal Investigator (Plen 4)

GINA POE

Gina R. Poe is an American neuroscientist specializing in the study of sleep and its effect on memory and learning. Her findings have shown that the absence of noradrenaline and low levels of serotonin during sleep spindles allow the brain to form new memories during REM, as well as restructure old memory circuits to allow for more learning during later waking periods. She currently works as a professor at the University of California, Los Angeles (UCLA). Gina Poe has been working since 1995 on the mechanisms through which sleep serves memory consolidation and restructuring. Dr. Poe is a southern California native who graduated from Stanford University then worked for two post-baccalaureate years at the VA researching Air Force Test Pilots' brainwave signatures under high-G maneuvers. She then earned her PhD in Basic Sleep in the Neuroscience Interdepartmental Program at UCLA under the guidance of Ronald Harper then moved to the University of Arizona for her postdoctoral studies with Carol Barnes and Bruce McNaughtons looking at graceful degradation of hippocampal function in aged rats as well as hippocampal coding in a 3-D maze navigated in the 1998 space shuttle mission. She brought these multiunit teachings to answer a burning question of whether REM sleep were for remembering or forgetting and found that activity of neurons during REM sleep is consistent both with the consolidation of novel memories and the elimination of already consolidated memories from the hippocampus, readying the associative memory network for new learning the next day. Moving first to Washington State University then to the University of Michigan before joining UCLA in 2016. Research Interests: The Poe lab investigates the mechanisms by which sleep traits serve learning and memory consolidation. Memories are encoded by the pattern of synaptic connections between neurons. We employ tetrode recording and optogenetic techniques in learning animals to see how neural patterns underlying learning are reactivated during sleep, and how activity during sleep influences the neural memory code. (Plen 1)

PAAVO PYLKKÄNEN

Paavo Pylkkänen, University of Helsinki and University of Skövde Paavo Pylkkänen, Ph.D., is Senior Lecturer in Theoretical Philosophy and Director of the Bachelor's Program in Philosophy at the University of Helsinki. Working as Vice Dean for Research in 2018-2020 he had the main responsibility for developing the new profiling area Mind and Matter: Foundations of Information, Intelligence and Consciousness for the University of Helsinki. **https://www.helsinki.fi/en/mind-and-matter** His main research areas are philosophy of mind, philosophy of physics and their intersection. Pylkkänen has explored whether the problem of consciousness can be tackled in the framework of the new holistic and dynamic worldview that is emerging from quantum theory and relativity. He has in particular been inspired by the physicists David Bohm and Basil Hiley's interpretation of quantum theory and has collaborated with both of them. He is also Associate Professor of Theoretical Philosophy (currently on leave) at the Department of Cognitive Neuroscience and Philosophy, University of Skövde, where he initiated a Consciousness Studies Program. (Plen 3 & 12)

DEAN RICKLES

Dean Rickles is Professor of History and Philosophy of Modern Physics at the University of Sydney, where he is a director of the Sydney Centre for Time. His books include A Brief History of String Theory: From Dual Models to M-Theory (Springer, 2016); Covered in Deep Mist: The Development of Quantum Gravity, 1916-1956 (Oxford University Press, 2020); Life is Short: An Appropriately Brief Guide to Making it More Meaningful (Princeton University Press, 2022) and Dual-Aspect Monism and the Deep Structure of Meaning (co-authored with Harald Atmanspacher: Routledge, 2022). (Plen 10)

JUSTIN RIDDLE

Justin Riddle is an assistant professor at Florida State University in the Department of Psychology. As the principal investigator of the Riddle Lab, Justin is using simultaneous neuroimaging and brain stimulation

to study the neural basis of cognitive control. Cognitive control is impaired in patients with psychiatric illness. A better understanding of the brain activity patterns that implement cognitive control will enable novel therapeutic interventions for psychiatry.

Justin is currently working on projects using concurrent electroencephalography (EEG) with rhythmic transcranial magnetic stimulation (TMS) to target neural oscillations during cognitive control tasks. In addition, Justin has pioneered novel transcranial alternating current stimulation techniques to delineate dimensions of cognitive control. These dimensions of cognitive control are altered by specific symptoms of major depressive disorder. (Plen-6)

CALEB SCHARF

Caleb Scharf is a British-American astronomer and popular science author. He is currently the senior scientist for astrobiology at the NASA Ames Research Center in Mountain View, California. He formerly served as the director of the multidisciplinary Columbia Astrobiology Center, New York. (Plen 9)

PHILLIP SCHMITT-KOPPLIN

Prof. Ph. Schmitt-Kopplin performs tailored and comprehensive chemical profiling and metabolomics in the food-health continuum. He has a strong profile in analytical chemistry with a background in ecological and environmental chemistry (Prof. F. Korte, Prof. A. Kettrup). His interests are in integrating analytical approaches for complex molecular mixtures, combining (ultra)high resolution mass spectrometry, (µ)separation sciences, NMR-spectroscopy with chemometrics and (bio)informatics for the description of complex organic systems on a molecular level. A focus in the last decades was to implement ultrahigh resolution mass spectrometry into cross-Omics applications and for a rapid and robust tool for deep metabotyping and small molecules profiling in the fields of environment, food and health. His interdisciplinary studies are related to the interface of chemistry and biology. He is director of the research unit analytical BioGeoChemistry of the Helmholtz Munich and heads the Comprehensive Foodomics Platform at the Institute of analytical Food Chemistry of the Technische University Munich Germany. His interest in biotic and abiotic chemical processes lead him closer to the community of Molecular Evolution in Prebiotic Environments and he is involved in various sample return missions in the analytical teams with NASA and JAXA. (Plen 9)

BILL SEAGER

William Edward Seager is a Canadian philosopher. Now retired, he spent his career as a professor of philosophy at the University of Toronto, Scarborough. His academic specialties lie in the philosophy of mind and the philosophy of science. He received his B.A. and his M.A. from the University of Alberta. Books: The Routledge Handbook of Panpsychism, Editor, Routledge, 2020; Theories of Consciousness, 2nd Edition, Routledge, 2016; Natural Fabrications: Science, Emergence and Consciousness, Springer Frontiers Collection, 2012; Truth and Value: Essays for Hans Herzberger, Editor (with J. Tappenden and A. Varzi), University of Calgary Press, 2011; Theories of Consciousness, Routledge, 1999; Metaphysics of Consciousness, Routledge, 1991; The Leibniz Lexicon: A Dual Concordance to Leibniz's Philosophische Schriften, Olms, 1988, (With R. McRae, R. Finster, G. Hunter, M. Miles). (Plen 10)

AARON SCHURGER

Aaron Schurger, is a cognitive neuroscientist who studies perception, attention, and consciousness, with an emphasis on threshold-level perceptual decision making. He also maintains a separate line of research on the spontaneous voluntary initiation of movement. More recently he has turned his attention towards theories of consciousness and trying to discern where they guide us and where they might lead us astray. His is co-author of a new book, with Adrien Doerig and Michael Herzog, entitled "Neuroscientific Theories of Consciousness: The Grand Tour" due out in Fall 2024 (Cambridge University Press). (Plen 7)

SYMPOSIUM, Monday Evening, April 22, 2024 7:00 pm to 10:00 pm - Kiva Ballroom refreshments

Integrated Information Theory of Consciousness - Christof Koch, Allen Institute, Tiny Blue Dot Foundation, Seattle; Giulio Tononi, U Wisconsin, Melanie Boly, U Wisconsin, Matteo Grasso, U Wisconsin. Moderated by Paavo Pylkkänen, U Helsinki & U Skövde

CHRISTOF KOCH

Christof Koch, Ph.D., Chief Scientist and President, Allen Institute for Brain Science, Seattle, Washington and Chief Scientist of the MindScope Program. (Full bio under "Plenary")

This symposium will offer an introduction to Integrated Information Theory (IIT), its foundations, its empirical validations, and its implications. The first part will introduce IIT's endeavor to study subjective experience objectively, highlighting its differences with respect to other approaches, and providing an overview of IIT 4.0's core concepts and formalism. Then, we will illustrate how to apply this formalism to account for the qualitative content of experience such as the extendedness of visual space and the experience of the flow of time. We will then discuss IIT's empirical predictions, testing, and validation in experimental settings. We will end by examining the implications of IIT for the dissociation between consciousness and artificial intelligence.

GIULIO TONONI

Giulio Tononi is a neuroscientist and psychiatrist based at the University of Wisconsin-Madison, where he holds chairs in sleep medicine and consciousness science. His scientific work on consciousness has centered on the development of the Integrated Information Theory, a comprehensive theory of what consciousness is, its neural substrate, what determines its quantity and quality, and how it can be measured. The theory accounts for why certain brain areas are critical for consciousness and has led to the development of practical measures for assessing the quantity of consciousness in both healthy humans and unresponsive patients. His work on sleep has led to the Synaptic Homeostasis Hypothesis, a comprehensive theory of the core function of sleep that is supported by a large amount of empirical evidence.

MELANIE BOLY

Melanie Boly is a neurologist and neuroscientist. She has worked for more than twenty years in the field of altered states of consciousness such as vegetative state, sleep and anesthesia, under the mentorship

of Pr. Steven Laureys, Pierre Maquet, Adrian Owen, Marcello Massimini and Karl Friston. Dr. Boly's research aims at combining neuroimaging techniques such as PET, functional MRI, TMS-EEG, and high-density EEG to a theoretical framework, Integrated Information Theory, hoping to uncover the neural mechanisms of the level and contents of consciousness in healthy subjects and neurological patients.

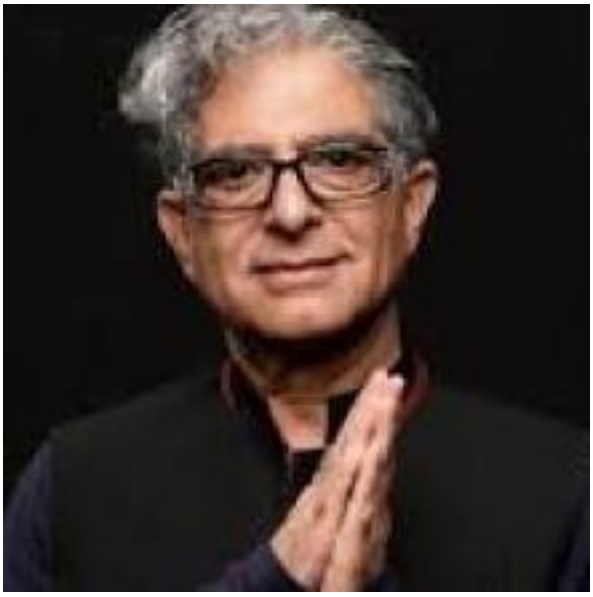
MATTEO GRASSO

Matteo Grasso is a Scientist based at the University of Wisconsin-Madison. After completing a PhD in Philosophy at Roma Tre University he worked as a postdoc at the University of Oxford, doing research on powers ontology and the metaphysics of consciousness. In 2018 he joined Giulio Tononi's lab to contribute to the development of Integrated Information Theory (IIT). His research spans across philosophy and computational neuroscience and focuses on improving the formalism and theoretical underpinnings of IIT, exploring its metaphysical foundations and implications, and applying IIT to the study of the qualitative content of experience, with particular focus on the extendedness of space, the feeling of the flow of time, and the experience of objects as particular instances of general phenomenal concepts.

Experiential 2024 -early morning clinics

DEEPAK CHOPRA - Meditation - Conference Kickoff

Tuesday, April 23, 2024 - 7:15-8:15 am - Kiva Plaza



DEEPAK CHOPRA MD, FACP, FRCP founder of the Chopra Foundation, a non-profit entity for research on well-being and humanitarianism, and Chopra Global, a modern-day health company at the intersection of science and spirituality, is a world-renowned pioneer in integrative medicine and personal transformation. Chopra is a Clinical Professor of Family Medicine and Public Health at the University of California, San Diego and serves as a senior scientist with Gallup Organization. He is also an Honorary Fellow in Medicine at the Royal College of Physicians and Surgeons of Glasgow. He is the author of over 95 books translated into over forty-three languages, including numerous New York Times bestsellers. For the last thirty years, Chopra has been at the forefront of the meditation revolution and his upcoming book, Quantum Body (Harmony Books, 12/5/23) delves into the innovative world of quantum science and shows how unlocking its secrets can revolutionize how we live and age – and, ultimately, how we can eradicate disease. TIME magazine has described Dr. Chopra as “one of their top 100 most influential people.” www.deepakchopra.com

ELIZABETH W. KRASNOFF

“Lunch Time Sound Reset and Integration – Sound Medicine® – Binaural Beats- “

12:30 PM - 1:30 PM Wednesday, Friday - 10 min. demos AND Exhibitor evening hours - yoga mats provided - Rincon

Elizabeth W. Krasnoff - Sound Medicine® arrives and puts on headphones; listens to audio on the headphones for ten minutes; they can be silent and lying down with eyes closed, sitting, or moving and stretching. Formulas lab tested at PsyTek labs with support from former president Thomas Brophy of CIHS, under the mentorship of Leslie “Allan” Combs. Here is a video. The results of my pilot study, which allows my formulas to be considered qualified as evidence based, were published in Frontiers in Neuroscience. Elizabeth W. Krasnoff, PhD, was born and raised in New York, living now on the west coast in Los Angeles and in NY City. Her doctorate is in Transformative Studies, with a focus in Consciousness Studies at the California Institute of Integral Studies (CIIS). Her dissertation reviews the transformative effects of sound, specifically "The Effects of Auditory Binaural Beats on Consciousness and the Human Nervous System." Her first pilot study tested her binaural beats formulas, received positive results, and is published in Frontiers in Neuroscience. Elizabeth is also a certified Heartmath® and Energy Practitioner. Her MA is in Depth Psychology and Mythology from Pacifica Graduate Institute. Her BA in English with a Russian concentration was received from Boston College, Phi Beta Kappa, Summa cum laude. From 1994-1998 she lived abroad in Russia refining her comprehension of the Russian language.

SOHAIL SHAKERI - Rumi Healing Meditation

Wednesday, 4/24 & Friday, 4/26 - 7:15-8:15 am - Catalina J

Sohail Shakeri is a Harvard-trained professor, healer, author, mystic and business consultant. He has been immersed in the mystical teachings of Jalaluddin Rumi both existentially and intellectually since the dawn of the 21st century. He has taught Philosophy, Humanities and Religious Studies at both the college and university levels. His main interests lie in uncovering the essential spiritual truths lying behind our mainstream cultural narratives from a foundation of love and consciousness. For more information about Professor Shakeri's healing work, you can find out more on his website, www.SacredPowerMedicine.com, or on Psychology Today. To learn more about his Conscious Consulting work for corporate professionals, visit www.ConsciousConsultants.org

LESLIE DEERE

Altered States Art as a Meditative & Restorative Tool - Painting Colour and Sound with Gestures in Virtual Reality - Coronado

Wed-Fri: Lunch Time and during evening Exhibitor hours (7-10pm)

A current Postdoctoral researcher at the Guildhall conservatoire in London Leslie Deere's current research focuses on audiovisual experience, music, movement and colour therapies through XR technologies. Leslie's creative practice explores experiential and immersive encounters that traverse the veil between the concrete and the metaphysical. Deere is a multimedia artist with a background in classical dance and an altered states art facilitator. In 2023 Leslie presented her PhD research at two leading conferences on psychedelic research including Breaking Convention at the University of Exeter, England and the ALPs Conference at the Bâtiment des Forces motrices, Switzerland. Alongside conferences and academic endeavours Leslie has exhibited her project, entitled Array Infinitive, at notable venues such as CCA Glasgow and Roundhouse London. Most recently, Leslie conducted a new series of listening and activation workshops at the Glasgow Women's Library exploring the work of composer Pauline Oliveros. This spring Leslie will present a solo performance of Array Infinitive at House of Tyers, a new art salon in NYC. Deere's work is in public and private collections and she has performed and exhibited internationally. Leslie is a published academic journal author and will release her first authored chapter this year as part of an upcoming book on Computational Art, published by Springer. Leslie has a BA Honours in Sonic Art, MFA RCA and PhD from the Glasgow School of Art. PhD Project - Array Infinitive https://lesliedeere.com/VR.html

Transmission of Awakening

HIDEHIKO SAEGUSA

Thursday, 4/25- 7:15-8:15 am - Catalina KL

Hidehiko Saegusa is a professor at the Indian Institute of Technology, co-director of the Consciousness Science Laboratory at the California Institute of Human Sciences, and a member of the Board of Directors and Research Scientist at the Center for Consciousness Studies at the University of Arizona. He spent 15 years in India, where he trained in all kinds of spiritual practices and studied Indian philosophy. He studied Indian philosophy and achieved a profound awakening in the tenth year. As a professor, director, and board member of 3 universities, Hide has been at the forefront of consciousness science, neuroscience, and psychological studies of awakening and spirituality. A well-known spiritual teacher in Japan, Hide is also the Director of the largest school in Japan on Politics: Japan school of policy making. As an entrepreneur, Hide founded and currently runs Nirvana Stone Corporation, a successful wholesale gemstone and crystal company.

Soul Sickness & Soul Healing Techniques

MASTER ZHI GANG SHA - PETER HUDOBA - RULIN XIU

7:15 AM-8:15 AM

Wed 4/24 (Catalina KL) - Thur 4/25 (Exec Bd Rm) - Fri 4/26 (Catalina KL) - Sat 4/27 (Catalina J)

Master Zhi Gang Sha is a Tao grandmaster, healer, teacher, and author of 30 books, including 11 New York Times bestsellers and several others on the bestseller lists of the Wall Street Journal, USA Today, and Amazon. He has an MD degree in Western medicine from China and is also a doctor of traditional Chinese medicine and acupuncture. Master Sha has combined the essence of Western medicine with ancient wisdom to create Soul Mind Body Medicine®, Master Sha's Soul Healing®, and Tao teachings to help humanity. He is a grandmaster of several Asian arts and in 2002 was named Qigong Master of the Year at the Fourth World Congress on Qigong. With the creation of Tao Calligraphy, he received the highest honors a Chinese calligrapher can receive, being appointed to the position of National Chinese Calligrapher Master as well as Honorable Researcher Professor by the State Ethnic Academy of Painting in Beijing, China. Master Sha founded the Tao Academy to share Tao wisdom and practices through classes, workshops, retreats, and training programs. He has trained thousands of teachers and practitioners worldwide and taught many students simple but powerful self-healing techniques. Through the Sha Research Foundation, he has sponsored scientific research studies that have shown the benefits of the Tao practices and Tao Calligraphy. For his original contributions, Master Sha® was named the Spiritual Innovator of the Year in 2020 by the International Association of Top Professionals. A renowned humanitarian, he founded the Love Peace Harmony Foundation and has received widespread recognition for his service to humanity, including the Martin Luther King, Jr. Commemorative Commission Award for promoting world peace. https://drsha.com/about-master-sha/

PETER HUDOBA

Peter Hudoba - Dr. Hudoba is a distinguished neurosurgeon and specialist in pain management and non-surgical spinal care. He received his medical degree from University of Komenskeho, Czechoslovakia in 1982 and practiced as a neurology resident at the University of Komenskeho. Dr. Hudoba relocated to Canada in late 80's and performed pioneering research at McMasters University in Neurosciences. Dr. Hudoba then went on to practice as a neurosurgery resident at University of Toronto before joining Royal University Hospital in Saskatchewan as a full staff neurosurgeon consultant. During this time period he also taught at the University of Saskatchewan as a professor and served as Head of Neurosurgical postgraduate programs there from 1999 to 2000. During his time at the University he established the Spinal Rounds program. Dr. Hudoba has received several awards including Excellence in Teaching Award from University of Saskatchewan and Thomas P. Morley Neurosurgical Resident prize from the University of Toronto. Dr. Hudoba has presented at many professional and educational conferences in Canada, the United States, United Kingdom, India, and other venues. He has served on a number of committees over the years, including Secretary of Neurosurgical Association of Saskatchewan, and was member of Council of Canadian Neurosurgery, American Association of Neurosurgical Surgeons and Society of Neurosurgical Surgeons. He has worked with the Sha Research Foundation for the last 17 years, initially as CEO and President and is currently as a Director of Research. Research studies on soul healing by Dr. Peter Hudoba https://www.sharesearchfoundation.com/studies.html

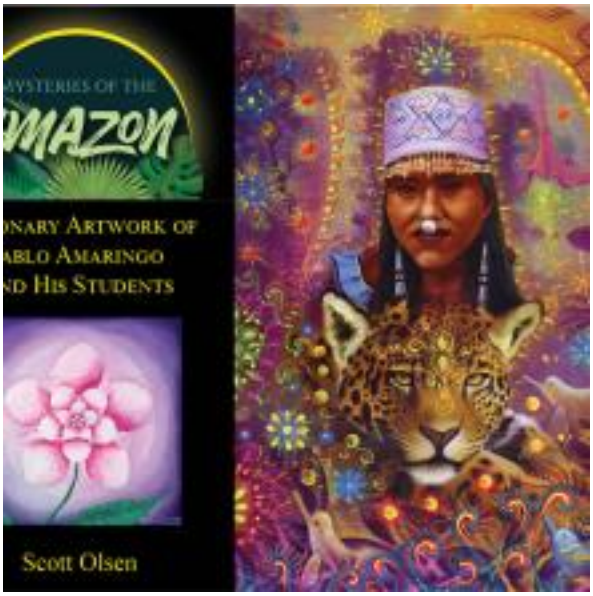
RULIN XIU

Rulin Xiu, Ph.D - Dr. Rulin Xiu was educated as a theoretical physicist in UC Berkeley, receiving her doctoral degree for her work on string theory and Grand Unification Theory. After working in Houston Advanced Research Center and Harvard University, she founded Hawaii Theoretical Physics Research Center. Her life work and breakthrough research is on the Grand Unification Theory (GUT), a theory that derives the one mathematic formula from fundamental principle to explain everything. Her recent work is using a new way to understand quantum physics and apply it to study consciousness, soul, life, and medicine. Her cutting-edge research helps integrate science and spirituality at the fundamental level. Dr. Rulin Xiu is co-founder of Tao Science and co-author of the books, Tao Science and Soul Mind Body Science System, with Dr. and Master Zhi Gang Sha. Some of Dr. Rulin Xiu's research https://taosciences.com/research/

SCOTT OLSEN

Timaeus Academy

The Artwork of Ayahuasquero, Pablo Amaringo - NeoAmazonian style. Dr. Olsen has collected this artwork over a 25 year period while making excursions into the Amazonian rainforest to work with Mestizo and Shipibo shamans. - Grand Ballroom Lobby



Author: three books, The Golden Section: Nature's Greatest Secret, Mysteries of the Amazon: Visionary Artwork of Pablo Amaringo & His Students, and A Grand Unification of the Sciences, Arts & Consciousness: Rediscovering the Pythagorean Plato's Golden Mean Number System, and some of the visionary artwork.

MARK VALLADARES

TennisCentric
Loews Tennis Courts - 4/24-4/27 - 7:15 AM- 8:15 AM

A Tennis Teaching Professional who studies “Body and Brain Dynamics” to inform skill acquisition, training and performance. Valladares’ experiential approach is coupled with an interdisciplinary survey of cognitive neuroscience, biology, tensegrity, fractal time and neural oscillations. His current work ties the Hard Problem to a quantifiable basis. He teaches at the Overland Park Racquet Club in Kansas City. His work includes the TennisCentric Approach to Consciousness, a meditational tennis clinic offered at the TSC conferences since 2016. Amherst College BA Neuroscience & English/ USPTA Elite/ PTR Pro

ROGER RUSSELL; JEFF HALLER

The Feldenkrais Method®: Curiosity, Moving and Awareness

Wed 4/23 Fri 4/26 - Sat - 4/26 - 7:15 - 8:15 am

VENTANA ROOM - second floor - yoga mats provided

Roger Russell, MA, PT and Jeff Haller, Ph.D. - These early morning sessions will offer a practical experience in Feldenkrais Awareness through Movement® lessons. The lessons provide insight about how moving ourselves is the core of being conscious; offering unexpected discoveries of what you can do with your attention and movement capabilities. Contrary to most exercise systems Feldenkrais® lessons are opportunities to go slow, be easy with yourself and nuture your curiosity. You will find that most of your beliefs about your body, fitness and coordination seriously underestimate your potential for healthy movement. Furthermore, improving your subjective experience of moving enhances your consciousness of yourself, and surprisingly, shifts your engagement with other people.

DOUGLAS TATARYN

Finding and Clearing the Emotional Roots of your Suffering

Wed 4/24, Thur 4/25, Fri 4/26, 12:30-1:30 (SANTA RITA)

Not sleeping well? Anxious before your presentation? Ruminating over something from the past? Irritable or anxious all the time? These workshops will help you clear the unconscious processes high jacking your system and causing these disruptions. Be prepared to make contact with your emotional system. This is a safe space to experience our feelings fully. Long time meditator (48+ years) and Buddhist practitioner, Dr Tataryn received his Ph.D. in 1991 from the U of A, publishing in hypnosis, statistics, research methodology, and epidemiology. Working as a clinician since 2001 he developed a new framework for understanding the emotional system and its under appreciated role in mental health problems. Find out more info see the poster presentations or http://www.bioemotiveframework.com