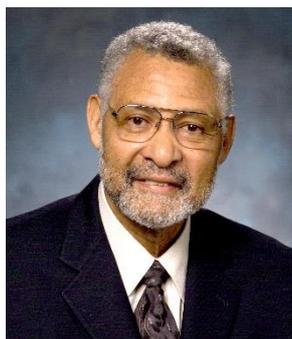


IUPAP EXECUTIVE COUNCIL OFFICERS 2018-2020



President: Kennedy Reed

Email: reed5@llnl.gov

Kennedy Reed's field of research is theoretical atomic physics. His work has primarily focused on theoretical studies of atomic processes in high temperature plasmas. He worked in the Physics Division at Lawrence Livermore National Laboratory, and has also been involved in promoting physics research and education in Africa.



Past-President: Bruce McKellar

Email: bhjmckellar@mac.com

Bruce McKellar is an Emeritus Professor of the University of Melbourne, School of Physics. His recent work has included emphasizing the importance of neutrino-neutrino interactions in understanding the oscillations of neutrino species in a dense neutrino background, as occurs in the early universe and in supernovae, studying CP violation in atoms, nuclei and the B meson system, and in understanding the observation and applications of the He-McKellar-Wilkens phase.



President-Designate: Michel Spiro

Email: mpiro@admin.in2p3.fr

Michele Spiro's field of expertise is Experimental Particle and Astroparticle physics: he was active at CERN, performed experiments in deep underground laboratories and observations at La Silla telescopes in Chile.



Secretary General: Kok Khoo Phua

Email: kkphua@wspc.com.sg

Kok Khoo Phua is the Founding Director of the Institute of Advanced Studies (IAS) at Nanyang Technological University (NTU) and Adjunct Professor of Department of Physics at National University of Singapore (NUS). He got DIC from Imperial College, London University. He received his Ph.D. and D.Sc. from Birmingham University. He is the fellow of American Physical Society (APS) and Singapore National Academy of Science (SNAS). He is the advisory board member of University of Nottingham Ningbo China. He holds honorary doctoral degrees from Nankai University and University of Nottingham Ningbo China. As a theoretical high energy physicist, he did some interesting and useful work in particle physics, particularly in the field of phenomenology in high energy collisions.



Associate Secretary General: Rudzani Nemutudi

Email: rudzi@tlabs.ac.za

Rudzani Nemutudi's fields of interest include mesoscopic semiconductor devices fabricated using proximal probe microscopic techniques such as AFM (Atomic Force Microscope) and STM (Scanning Tunneling Microscope), surface science and accelerator-based ion beam analysis. He is the Deputy Director of iThemba LABS (Laboratory for Accelerator Based Sciences) in South Africa.



Deputy Secretary General: Kwek Leong Chuan

Email: cqtklc@nus.edu.sg

Leong Chuan Kwek is a Principal Investigator at the Center for Quantum Technologies, NUS since its inception and the Deputy Director at IAS at NTU, Singapore. He works on quantum information science and atomtronics and has published more than 200 refereed papers on the subject. He is an elected Fellow of the American Association for the Advancement of Science (AAAS), the Institute of Physics (UK) and the Institute of Physics (Singapore). He currently serves as the Regional Representative of Organization of Chinese Physicists and Astronomers (USA), Secretary General for the South East Asian Theoretical Physics Association and IUPAP WG5 (Women in Physics). He is also an editorial member of the Association of Asia Pacific Physical Societies Bulletin Board. LC Kwek was a co-recipient of the Singapore National Science Award (Team) in 2006, the IPS Premier Research award (2006) and the IPS President Medal (2016). He was the Fujitsu Visiting Professor at the University of Cambridge in 2004 and the former President of the Institute of Physics Singapore [IPS] (2008-2012). He is currently the President of the Asian Physics Olympiad and a steering committee member of the Asia Pacific Conference of Young Scientists.

Vice-Presidents Elected at Large



Vice-President at Large (Finance): Wang Enge

Email: egwang@pku.edu.cn

Enge Wang is the Vice President, Chinese Academy of Sciences (CAS), President Emeritus, University Chair and Professor of Physics, Peking University. His main research accomplishments include the fundamental understanding of the kinetics involved in the formation and decay of surface-based nanostructures, development of chemical vapor deposition of light-element nanomaterials, and study of water behaviors in confinement system. He is also the member of the World Academy of Sciences (TWAS), and a fellow of the American Physical Society.



Vice-President at Large (Centenary): Monica Pepe-Altarelli

Email: Monica.pepe.altarelli@cern.ch

Monica Pepe Altarelli is an experimental particle physicist working at the LHCb experiment at CERN. Her current main scientific interest is the search for New Physics beyond the Standard Model through the study of very rare decays of charm and beauty-flavoured hadrons and precision measurements of CP-violating observables.



Vice-President at Large (Outreach): Vitaly Kveder

Email: kveder@issp.ac.ru

Vitaly Kveder works in experimental physics of semiconductors, in particular study of electronic properties of defects in semiconductors and “defect engineering” for solar cells applications.



Vice-President at Large (Gender Champion): Silvina Ponce Dawson

Email: silvina@df.uba.ar

Silvina Dawson’s field of research is Biological Physics. In particular, I look into the mechanisms by which cells communicate with their environment. To this end I combine optical experiments with mathematical modeling and theoretical analyses.



Vice-President at Large (New Members): Nithaya Chetty

Email: nithaya.chetty@up.ac.za

Nithaya Chetty is a computational solid state physicist, working on 2 dimensional systems using density functional methods. He has been one of the drivers for the IUPAP-sponsored African School for Electronic Structure Methods and Applications (ASESMA), which is a series of workshops held every two years in different sub-Saharan countries, designed to foster a collaborative network for research and higher education in the areas of Computational Materials and Biological Sciences.

Commission Chairs

Commission on Symbols, Units, Nomenclature, Atomic Masses & Fundamental Constants (C2)



Peter Mohr

Email: mohr@nist.gov

Peter Mohr's primary area of research is in Quantum Electrodynamics theory and its application to bound states. He is also involved with work on the CODATA least-squares values for the fundamental constants, which they recommend every four years. Another area of involvement is with developments in the International System of Units and its redefinition in terms fundamental constants that will take place in the near future.

Commission on Statistical Physics (C3)



Rahul Pandit

Email: rahul@physics.iisc.ernet.in

Rahul Pandit works on a variety of problems in Statistical Physics, Condensed-Matter Physics, and Computational Science. Over the past few decades, he has studied Turbulence, in Fluids, Plasmas, Superfluids, Multi-phase flows, and Complex Fluids, Electrical-wave Turbulence and Cardiac Arrhythmias, and Cold-atom Systems.

Commission on Astroparticle Physics (C4)

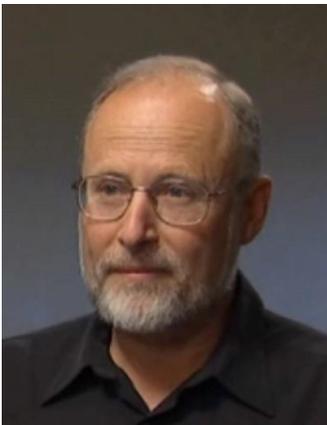


Sunil Gupta

Email: gupta.crl@gmail.com

Sunil Gupta is a senior Professor at the Tata Institute of Fundamental Research, Mumbai. Expertise in high energy cosmic rays including air shower phenomenon, high energy interactions etc., multi-TeV gamma ray astronomy, and space weather studies. Currently, PI of GRAPES-3, an India-Japan collaboration, located at Cosmic Ray Laboratory in Ooty, India.

Commission on Low Temperature Physics (C5)



William P Halperin

Email: w-halperin@northwestern.edu

William Halperin is an experimental condensed matter physicist whose research on unconventional superconductivity and superfluid ^3He takes place at the extremes of ultra-low temperatures and very high magnetic fields.

Commission on Biological Physics (C6)



Ramin Golestanian

Email: ramin.golestanian@physics.ox.ac.uk

Ramin Golestanian is a theoretical physicist at Oxford University with a background in nonequilibrium statistical physics, soft matter, and biophysics. He has been a strong advocate for the type of biological physics that regards biological systems as living matter, and aims to address new physical questions in these systems.

Commission on Semiconductors (C8)



Rolf Haug

Email: haug@nano.uni-hannover.de

Rolf Haug's group studies quantum effects in low-dimensional semiconductor structures which includes transport experiments with quantum dots, with quantum Hall effect systems, and with 2D materials.

Commission on Magnetism (C9)



Burkard Hillebrands

Email: hilleb@physik.uni-kl.de

Burkard Hillebrands is an experimental magnetism physicist. His special interests are in spin dynamics and magnonics, and in material properties of magnetic films and nanostructures. He is particularly interested in the fundamental properties and applications of magnons (quanta of spin waves), while his technical interest is in the development of space-, time- and phase resolved Brillouin light scattering spectroscopy and time resolved Kerr effect techniques.

Commission on Structure and Dynamics of Condensed Matter (C10)



Laura H Greene

Email: lhgreene@magnet.fsu.edu

Laura Greene's research is on quantum materials, focusing on fundamental studies to determine the mechanisms of unconventional superconductivity by planar tunneling and point contact electron spectroscopies and developing methods for predictive design of new families of superconducting materials.

Commission on Particles and Fields (C11)



Heidi Schellman

Email: Heidi.Schellman@oregonstate.edu

Heidi Schellman is an experimentalist working at the interface between electroweak and strong interactions physics. She has measured proton structure functions and the mass of the W boson; her most recent research is a study of nuclear effects in quasi-elastic anti-neutrino scattering.

Commission on Nuclear Physics (C12)



Claes Fahlander

Email: claes.fahlander@nuclear.lu.se

Claes Fahlander's field of interest is studies of the structure of the atomic nucleus, a unique many-body quantum system. The research is performed at leading accelerator laboratories around the world, and it focuses on nuclei far from the line of beta-stability, close to the proton drip line, and more recently towards studies of super heavy elements.

Commission on Physics for Development (C13)



Sekazi K. Mtingwa

Email: mtingwa@mit.edu

Sekazi Mtingwa is a theoretical physicist who specializes in accelerator beam dynamics and high energy physics. He shared the American Physical Society's 2017 Robert R. Wilson Prize with James Bjorken and Anton Piwinski for their work on a phenomenon called intrabeam scattering, which has empowered major discoveries in a broad range of disciplines by a wide variety of accelerators, including hadron colliders, damping rings/linear colliders, and low emittance synchrotron light sources.

Commission on Physics Education (C14)



Roberto Nardi

Email: nardi@fc.unesp.br

Roberto Nardi is an Associate Professor at the School of Sciences (FC), Education Department, at the State University of São Paulo (UNESP), Brazil. He graduated in Physics at UNESP (1972), earned his master's at the Temple University (USA) (1980) and PhD in Education (Physics Teaching) at São Paulo University (1990). He is now a level I-A researcher at CNPq at the Brazilian National Research Council. He was a member of the Physics Education Research Commission of the Brazilian Society of Physics (SBF, 2008-2012) and Coordinator of the Science and Mathematics Education Division in the Post Graduate Evaluation System at CAPES (2006-2010). He was also former President (2003-2005), Vice President (2001-2003) and founder of the Brazilian Association for Research in Science Education (ABRAPEC) and the editor of the *Ciência & Educação* Journal.

Commission on Atomic, Molecular, and Optical Physics (C15)



Roberto Rivarola

Email: rivarola@ifir-conicet.gov.ar

Roberto Rivarola's professional interest is focused on the theoretical description of the dynamical interaction of beams composed by atomic particles impacting on atoms and molecules, including biological ones.

Commission on Plasma Physics (C16)



Minh Quang Tran

Email: minhquang.tran@epfl.ch

Minh Quang Tran works on Heating and Current Drive of magnetically confined fusion plasma. He is presently Project Leader for the Work Package Heating and Current Drive of the DEMO project within European Consortium EUROfusion.

Commission on Laser Physics and Photonics (C17)



Tsuneyuki (John) Ozaki

Email: ozaki@emt.inrs.ca

Tsuneyuki Ozaki works on the generation and application of intense ultrafast radiation sources, covering a wide spectrum from X-rays to terahertz. Interested applications include atomic and molecular physics, condensed matter physics, biology and medicine.

Commission on Mathematical Physics (C18)

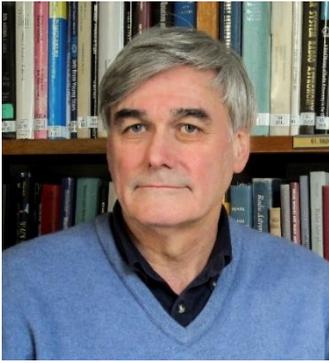


Bruno Nachtergaele

Email: bxn@math.ucdavis.edu

Bruno Nachtergaele is a Distinguished Professor of Mathematics at the University of California, Davis. His general research area is Mathematical Physics with an emphasis on equilibrium and non-equilibrium statistical mechanics, quantum spin systems, quantum information theory, and applications of these fields in condensed matter physics.

Commission on Astrophysics (C19)

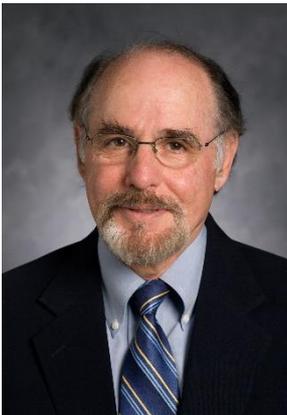


Gerard Gilmore

Email: gil@ast.cam.ac.uk

Gerry Gilmore is an astrophysicist at Cambridge University, UK. His primary research focus is the structure and evolution of the Milky Way, mapped through spectroscopic and astrometric (Gaia) surveys.

Commission on Computational Physics (C20)



David P Landau

Email: dlandau@physast.uga.edu

David Landau works on computer simulations of models in hard and soft condensed matter. Methodologies used include Monte Carlo, Monte Carlo renormalization group, molecular dynamics, and spin dynamics.