

## Editors

### Editor-in-Chief

**Philippe Bouyer**

**Coordinator – KAT-3 program on quantum sensing, Quantum Delta NL**

**Professor – University of Amsterdam – Technical University Eindhoven**



Dr. Bouyer is coordinating since 2022 the Quantum Sensing program of the Quantum Delta NL dutch national initiative. He was previously director of the Laboratory for Photonics, Digital and Nano Sciences at CNRS/IOGS, Université Bordeaux and deputy manager of the Institute d'Optique (Nouvelle Aquitaine branch). Additionally, he is the co-founder and consulting chief scientist of MuQuans, now iXBlue, France. Dr. Bouyer earned his Ph.D. at the École Normale Supérieure/laboratoire Kastler Brossel, Université Paris Sud in 1994.

### Associate Editors

**Vanderlei S. Bagnato, IFSC - University of São Paulo (Brazil)**



Vanderlei S. Bagnato received his PhD from MIT in 1987 in the area of cold atoms after achieving a Bachelors degree in Physics (from the University of São Paulo) and Materials Engineering (from the Federal University of São Carlos). He pioneered work on Bose-Einstein condensates with trapped atoms. He currently works in quantum turbulence with Bose condensates and thermodynamics with global variables. He also works with Biophotonics in the development of techniques for the treatment of Cancer and microbiological control. He has published papers and supervised many theses. He is a member of the ABC-Brazilian Academy Sciences, of the NAS-National Academy of Science - USA, of the PAS- Pontifical Academy of Science - Vatican. He received several national and international awards and honors. He is currently Full professor of the University of São Paulo and also Fellow of the Hagler Institute for advances Studies - Texas A&M. For more information view [Vanderlei S. Bagnato's web page](#).

**Xuzong Chen, Peking University (China)**



Xuzong Chen is a Professor in the School of Electronic Engineering and Computer Science, at Peking University. He is currently the Head of the Laboratory on Ultracold Atoms in Space at Peking University. He was director of Institute of Quantum Electronics at Peking University for 15 years. He works on a variety of research topics including: Fundamentals of Quantum Science and quantum technology, Cold Atom Physics in space, Many body quantum physics, Bose-Einstein Condensation, Bose-Fermi mixture, Quantum Simulation, Atomic and molecular hyperfine spectra, Fiber laser comb generator, Novel atomic cesium clock, and more. For more information view [Xuzong Chen's web page](#).

**Kwek Leong Chuan, *Center for Quantum Technologies (Singapore)***

LC Kwek is currently a Principal Investigator at the Center for Quantum Technologies, National University of Singapore. He is also a Co-Director of the Quantum Engineering Program, NRF and Co-Director of the Center for Science and Engineering at the Nanyang Technological University. He is also the current Deputy Secretary General of the International Union of Pure and Applied Physics (IUPAP). His main research interest are foundation in quantum mechanics including quantifying multipartite quantum entanglement; quantum cryptography, quantum computation and atomtronics. For more information view [Kwek Leong Chuan's web page](#).

**Andrew Forbes, *University of the Witwatersrand (South Africa)***

Andrew is presently a Distinguished Professor within the School of Physics at the U. Witwatersrand (South Africa) where he has established a new laboratory for Structured Light. Andrew is active in promoting photonics in Africa, a founding member of the Photonics Initiative of South Africa and initiator of South Africa's Quantum Roadmap. He is a Fellow of both SPIE and the OSA, an elected member of the Academy of Science of South Africa and holds an A-rating by the South African NRF. He holds 3 honorary professorships and in 2015 won a national award for his contributions to photonics in South Africa. In 2020 he was awarded the Georg Forster prize from the Alexander von Humboldt Foundation for outstanding contributions to photonics. Andrew spends his time having fun with the taxpayers' money, exploring structured light as classical and quantum states.

**Ivette Fuentes, *University of Southampton (UK)***

Ivette Fuentes is a theoretical physicist who researches quantum information, quantum optics, quantum metrology, quantum communications in relation to relativity. She is Professor of Physics at the University of Southampton and Director of Physics of the Roger Penrose Institute. She obtained her PhD at Imperial College, London and has held several prestigious fellowships, including a Career Acceleration Fellowship (EPSRC), a Humboldt Fellowship at TU Berlin and Glasstone, and Junior Research Fellowships at Mansfield College, Oxford. For more information view [Ivette Fuentes' web page](#).

**Isabelle Robert-Philip, *CNRS – University of Montpellier (France)***

Dr. Isabelle Robert-Philip is currently CNRS researcher at the Laboratoire Charles Coulomb in Montpellier. She obtained her PhD in quantum optics applied to semiconductors at the Pierre and Marie Curie University in Paris. She is an experimentalist whose research includes quantum optics applied to solid-state materials (notably CQED-enhanced semiconductor sources of quantum light), quantum nano-optomechanics and diamond-based quantum sensing at nanoscale. For more information view [Dr. Isabelle Roberts-Philip's web page](#).

**Halina Rubinsztein-Dunlop, *The University of Queensland (Australia)***

Halina Rubinsztein-Dunlop is Professor of Physics in the School of Mathematics and Physics at the University of Queensland. She was educated at the University of Gothenburg and Chalmers University of Technology, Gothenburg in Sweden. She is a Director of Quantum Science Laboratory and was for 9 years Head of School of Mathematics and Physics. At the University of Queensland Halina leads a large research groups in experimental quantum atom optics, laser micromanipulation and nanooptics. She also leads a program in the ARC Centre of Excellence in Engineered Quantum Systems. Halina has been awarded Australian Institute of Physics International Woman in Physics, Lecture Tour Medal and University of Queensland Award for Excellence in Research Higher Degree Supervision. Halina is a Fellow of Australian Academy of Science, a Fellow of SPIE and of OSA. For more information view [Halina Rubinsztein-Dunlop's web page](#).

**Andre Schleife, *University of Illinois Urbana-Champaign (USA)***

André Schleife is a Blue Waters Associate Professor in Materials Science and Engineering at the University of Illinois at Urbana-Champaign. He obtained his Diploma and Ph.D. at Friedrich-Schiller-University in Jena. He then was a Postdoctoral Researcher at Lawrence Livermore National Laboratory before starting at Illinois in 2013. He received the NSF CAREER award, the ONR YIP award, and was an ACS PRF doctoral new investigator. André actively organizes national and international schools, workshops, and tutorials to advance the community around cutting-edge first-principles simulations of materials. He is co-chair of the Gordon Research Conference on "Computational Materials Science", Vice Chair of the Division of Computational Physics of the American Physical Society, and the co-lead of the Quantum Thrust of the IBM Illinois Discovery Accelerator.