IOMP webinars on IMPW 2021

Organizers: John Damilakis and Madan Rehani.

One webinar every day at 12 noon GMT.

Monday, 26th April

Monochromatic X-rays: A new source with potential to replace century-old technology

Further information: https://pubmed.ncbi.nlm.nih.gov/33368354/

Moderator: John Damilakis

Speakers: Madan Rehani and Eric Silver

Register: https://us02web.zoom.us/meeting/register/tZArdu6sqTouGNzPXbEEPsy-rHGa6ye8cR2R

Dr. Madan M. Rehani is Director, Global Outreach for Radiation Protection at the Massachusetts General Hospital, Boston, USA. He is President, International Organization for Medical Physics (2018-2021). He was earlier Radiation Safety Specialist at the International Atomic Energy Agency for 11 years and prior to that Professor and Head of Medical Physics at the All India Institute of Medical Sciences, New Delhi, India. Dr. Rehani is a Member, International Commission on Radiological Protection (ICRP). He is author of 8 Annals of ICRP, 4 of which as Chair of the Task Group. He is Senior editor BJR, Assoc Editor Medical Physics. He has more than 155

publications, has written 39 chapters in Books and has edited 5 books. He has published papers in high impact factor journals e.g. JAMA Intern Med, Br Med J, Eur Heart J, Cardiovascular Imaging, Am J Gastroenterol, Circulation J, The Lancet.

Eric Silver has dedicated his career to experimental high energy astrophysics. He spent 21 years as a Senior Astrophysicist at the Harvard-Smithsonian Center for Astrophysics (CfA) where he directed an interdisciplinary program of X-ray spectroscopy, polarimetry and low temperature physics for 1) the study of cosmic x-ray and gamma ray sources such as black holes, supernova remnants and clusters of galaxies; 2) fundamental physics investigations of highly charged ions produced in heavy ion accelerators and laboratory plasmas; and 3) industrial and medical applications where high resolution x-ray spectroscopic imaging is important to materials

and chemical analysis. The latter included studies of silicon wafers for the semiconductor industry, interstellar dust and cometary particles returned to Earth from NASA probes, examining artifacts nd fine art for conservation science, and even mapping anti-cancer drugs at the cellular level.

He received his B.S. degree in Physics from M.I.T. and Ph.D. in Astrophysics from Columbia University, has served on many NASA, NIH, DoE and NSF review panels, authored/co-authored 130+ publications on spectroscopy and x-ray imaging and is the co-editor of a book on spectroscopy. Eric was a recipient of a NIH Challenge Grant and the George E. Burch Fellowship for new medical applications and has 16 patents to his credit.

Tuesday, 27th April

Artificial Intelligence and medical physics: The initial experience of the SINFONIA Horizon project
AI applications in Radiology and Nuclear Medicine

Further information: https://www.sinfonia-appraisal.eu/

Moderator: Mika Kortesniemi

Speakers: John Damilakis and Habib Zaidi

Register:
https://us02web.zoom.us/meeting/register/tZUucemtqj4vEtLygZPRDckteBTEdzFWPHwP

Prof. John Damilakis, PhD, FIOMP, FIUPESM
John Damilakis is professor & chairman at the Department of Medical Physics, School of Medicine, University of Crete & director of the Department of Medical Physics of the University Hospital of Heraklion, Crete, Greece. He is Vice President & President-elect of IOMP, Immediate Past President of EURAMED, Past President of EFOMP and Past President of the 'Hellenic Association of Medical Physics'. Prof. Damilakis is a member of 2 ICRP Task Groups & member of the steering committee of the 'EuroSafe Imaging' of the European Society of Radiology. As a Visiting Professor he has given lectures on dosimetry and radiation protection in Boston University, USA. His publications have been focused on medical radiation protection and dosimetry. He is editor of 2 books published by the IOP Publishing and Springer-Verlag and co-author of 2 chapters in books published by Springer and Academic Press. Number of publications in PubMed: 220, number of citations 7220, h-index 45 (Google Scholar, February 2021).

Professor Habib Zaidi is Chief physicist and head of the PET Instrumentation & Neuroimaging Laboratory at Geneva University Hospital and faculty member at the medical school of Geneva University. He is also a Professor at the University of Groningen (Netherlands) and the University of Southern Denmark. His research is supported by the Swiss National Foundation, private foundations and industry (Total 8.3M US$) and centres on hybrid imaging instrumentation (PET/CT and PET/MRI), computational modelling and radiation dosimetry and deep learning. He was guest editor for 11 special issues of peer-reviewed journals and serves on the editorial board of leading journals in medical physics and medical imaging. He has been elevated to the grade of fellow of the IEEE, AIMBE and the AAPM. His academic accomplishments in the area of quantitative PET imaging have been well recognized by his peers since he is a recipient of many awards and distinctions among which the prestigious (100'000$) 2010 kuwait Prize of Applied sciences (known as the Middle Eastern Nobel Prize). Prof. Zaidi has been an invited speaker of over 160 keynote lectures and talks at an International level, has authored over 320 peer-reviewed articles in prominent journals and is the editor of four textbooks.

Wednesday, 28th April

Patient radiation protection: How IAEA and WHO are contributing?

Moderator: Madan Rehani

Speakers: Ola Holmberg and Maria Perez

Click here for more details

Register:

https://us02web.zoom.us/meeting/register/tZMtdeCoqzIqH9YZlqwQsXnVD7nIF65ver79

Dr María del Rosario Pérez is a physician who worked in the field of radiation protection for more than 3 decades. She received her M.D. in 1980 from the School of Medicine of the Buenos Aires University (Argentina). She completed her professional education on Diagnostic Imaging and Radiotherapy and worked as radiation oncologist at a public hospital until 1990. After obtaining a post-graduate diploma on Radiation Protection and Nuclear Safety she worked at the National Atomic Energy Commission (CNEA) and the Nuclear Regulatory Authority (ARN). Since 2007 she works at the WHO Radiation and Health Unit in Geneva (Switzerland). She represents WHO at the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the IAEA Radiation Safety Standards Committee (RASSC), the International Commission on Radiological Protection (ICRP), the EC Art 31 Group of Experts and the Inter-Agency Committee on Radiation Safety (IACRS), which she is currently chairing.

Dr. Ola Holmberg is the Head of the Radiation Protection of Patients Unit at the International Atomic Energy Agency (IAEA), Vienna, Austria since the

last 12 years – an organization within the United Nations family. He is a medical physicist who has previously worked in Sweden, Ireland, the Netherlands and Denmark

Thursday, 29th April

Does contact shielding improve patient safety?

Moderator: Chai Hong Yeong

Speaker: Paddy Gilligan

Click here for more details

Register: https://us02web.zoom.us/meeting/register/tZEtc-ysqzMqG9CXTjaTJTmFysChiV3eTm36

Paddy Gilligan works as chief physicist in the Mater Private Hospital in Dublin Ireland. He has over thirty years' experience in diagnostic imaging, He has served on state boards for regulatory radiation protection agencies. He became associate professor in University College Dublin in 2017. He was the chair of the European congress of radiology physics programme in 2019 He was a member the radiation safety committee of the European Society of Radiology, and the Eurosafe imaging steering committee. Prior to becoming President of EFOMP he chaired the successful bid for ECMP 2022 for Dublin. He is a trustee of the Robert Boyle Foundation. He is currently chair of the Gonad and Patient Shielding (GAPS) group of experts who are in the process of producing a consensus document on patient shielding from the major European professional bodies involved in radiology.

Friday, 30th April

The management of unintended and accidental exposures

Moderator: Eva Bezak

Speaker: Colin Martin

Click here for more details

Register: https://us02web.zoom.us/meeting/register/tZYtcu-trjIrE9246p9pKHlmYbo2IwOd0Flw

Dr Colin Martin worked as a hospital-based Medical Physicist in Radiation Protection in Glasgow and Aberdeen, Scotland for over 30 years. He has now retired from the NHS but is an honorary senior lecturer for the University of Glasgow. Colin is Vice-Chair of ICRP Committee 3 (Protection in Medicine), chairs two ICRP Task groups and is a member of several others. He is a member of various UK and EU working parties, COMARE, which advises the UK government on medical uses of radiation, and he has chaired two IAEA Technical Meetings on avoidance and prevention of radiation incidents in medicine. His research interests include radiation protection, diagnostic radiology, radiation dosimetry, and non-ionising physics. He has co-authored/edited several textbooks on radiation protection, written over 300 articles including 150 papers in peer reviewed scientific journals. Colin is a member of Editorial Boards for the Journal of Radiological Protection and Radiation Protection Dosimetry.