Webcast – FLASH DEBATE: Is Oxygen the Primary Determinant in the FLASH Effect?

Some things are too important not to share, which is why we are giving free access to selected sessions from the FRPT 2022 Conference to everyone interested in FLASH and Particle Therapy.

We hope you enjoy this Debate between Marco Durante, Bethany Rothwell, Jeannette Jansen and João Seco and we look forward to seeing you at the FRPT 2023 Conference in Toronto!

Marco Durante

[modal_popup_box btnalign=”center” toppadding=”10″ btnradius=”8″ titletext=”Marco Durante” btntext=”Biography” btn_border=”#1e73be” btnclr=”#ffffff” bgclr=”#ffffff” bodybg=”#3b3b3b” hoverclr=”#ffffff” btnbg=”#2b2171″ hoverbg=”#f39200″]Prof. Dr. Marco Durante is Director of the Biophysics Department at GSI Helmholtz Center for Heavy Ion Research (Darmstadt, Germany) and Full Professor of Physics at the Technical University of Darmstadt. He is also Adjunct Professor of Physics at the University of Naples Federico II in Italy, and at the Gunma College of Medicine in Japan. Dr. Durante got his Ph.D. in physics in 1992 at the University Federico II and has worked as postdoc at the Lawrence Berkeley Laboratory (Berkeley, CA, USA), NASA Lyndon B. Johnson Space Center (Houston, TX, USA), and NIRS-QST (Chiba, Japan).
He is generally recognized as world leader in the field of particle radiobiology and medical physics and is co-author of over 400 papers in peer-reviewed scientific journals (h-index=50) and one patent on proton therapy (EU patent

WO2013083333). He is currently chair of the ESA Life Sciences Advisory Group and of the ESA Topical Team on Space Radiation, vice-chair of the Particle Therapy Co-Operative Group (PTCOG), member of the technical-scientific Committee of the Italian Hadrontherapy Center (CNAO) and of the Program Advisory Committee of the GANIL (Caen, France), KVI (Groningen, The Netherlands), iThemba (South Africa), and Rez (Czech Republic) accelerators. Dr.
Durante was President of the International Association for Radiation Research (IARR) 2011-15, and is Associate Editor in several International scientific journals. He has received many grants to support his research, primarily by ESA, EU H2020, ERC, and BMBF.[/modal_popup_box]

Bethany Rothwell

[modal_popup_box btnalign=”center” toppadding=”10″ btnradius=”8″ titletext=”Bethany Rothwell” btntext=”Biography” btn_border=”#1e73be” btnclr=”#ffffff” bgclr=”#ffffff” bodybg=”#3b3b3b” hoverclr=”#ffffff” btnbg=”#2b2171″ hoverbg=”#f39200″]Bethany Rothwell completed her MPhys at the University of Birmingham (2014-2018) and is currently working on a PhD in proton therapy within the Precise group at the University of Manchester. Her work involves the use of mathematical modelling techniques to investigate FLASH radiotherapy and cellular oxygen depletion.[/modal_popup_box]

Jeannette Jansen

[modal_popup_box btnalign=”center” toppadding=”10″ btnradius=”8″ titletext=”Jeannette Jansen” btntext=”Biography” btn_border=”#1e73be” btnclr=”#ffffff” bgclr=”#ffffff” bodybg=”#3b3b3b” hoverclr=”#ffffff” btnbg=”#2b2171″ hoverbg=”#f39200″]Jeannette Jansen recently started her new position as PostDoc in Marie-Catherine Vozenin’s lab at CHUV, Lausanne. During the past years, she investigated the role of oxygen in (FLASH-) radiotherapy on genetic and chemical levels in the course of my PhD at DKFZ, Heidelberg in João Seco‘s

lab. She investigated radiation-induced radiolysis on experimental and computational (=MC) approaches and gained a lot of experience in the cell culture lab, studying radiobiological endpoints in clonogenic assays, FACS analysis, and many more. Data analysis and statistics/machine learning methods in Python and R always complement the experiments.[/modal_popup_box]

João Seco

[modal_popup_box btnalign=”center” toppadding=”10″ btnradius=”8″ titletext=”João Seco” btntext=”Biography” btn_border=”#1e73be” btnclr=”#ffffff” bgclr=”#ffffff” bodybg=”#3b3b3b” hoverclr=”#ffffff” btnbg=”#2b2171″ hoverbg=”#f39200″]João Seco is an assistant professor of radiation oncology at Harvard Medical School and Massachusetts General Hospital. He earned his PhD from the Institute of Cancer Research, University of London.[/modal_popup_box]ALL WEBCASTS