

Day 1 : 9th November 2023

Time	Title	Speaker
08:30	Arrival, registration and (limited) breakfast	
09:00	Welcome and setting the scene	Russell Thomas
Session 1: UK NHS Facilities update		Chair: Ana Lourenco
09:15	Update talk: Proton Beam Therapy at UCLH	Colin Baker
09:30	Update talk: Proton treatment and experimental research at the Christie	Mat Lowe/Nick Henthorn/ John Warmenhoven
09:45	Update talk: An update of the ocular proton therapy service at Clatterbridge Cancer Centre	Lucy Partridge
10:00	Questions	
10:10	Comfort break	
Session 2: Mathematics in Radiation (MathRad)		Chair: Sarah Osman
10:20	Invited talk: Automated and online-adaptive planning for proton therapy - balancing speed and quality	Sebastiaan Breedveld
10:45	Primal-Dual, a novel approach to optimisation in treatment planning	Aaron Pim
11:00	Model for out-of-field doses in proton beam therapy for paediatric adnominal neuroblastoma	Daniela Botnariuc
11:15	Evaluation of the Varian AcurosPT Monte-Carlo dose calculation algorithm	Adam Aitkenhead
11:30	Discussion	
11:45	Coffee break	
Session 3: Radiobiology I		Chair: Giuseppe Schettino
12:05	Invited talk: Simulating dose to circulating immune cells. How much does the integral dose matter?"	Harald Paganetti
12:30	DNA damage models of different complexity levels do not predict fundamental differences in the induction or repair of damage	Shannon J Thompson
12:45	Are DNA repair defects an indication for proton or heavy ion therapy?	Stephen McMahon
13:00	Discussion	
13:10	Lunch	
13:55	Networking and Posters	
Session 4: Radiobiology II		Chair: Harald Paganetti
14:25	Update talk: The radiobiology of protons and high-LET radiation in head and neck cancer and glioblastoma cell models	Jason Parsons
14:45	Utilising ultra-high dose rate proton radiation to observe the FLASH effect in head and neck cancer	Jonathan Hughes
15:00	Making Voxel Level Computation of Proton Lineal Energy Spectra Feasible in Research and Clinical Contexts	Joseph M DeCunha
15:15	Investigating the DNA damaging effects of flash vs conventional dose rates via proton irradiation of plasmids	Abigail Hemming
15:30	Discussion	
15:45	Coffee break	
Session 5: Dosimetry and detectors		Chair: Anna Subiel
16:05	Invited talk: UK IPEM Code of Practice	Russell Thomas
16:20	Consistency of Faraday cup and ionisation chamber dosimetry of proton fields and the role of nuclear interactions	Christian Bäumer
16:35	Calculation of beam quality correction factors for particle beams using Gate/Geant4	Guillaume Houyoux
Session 6: Imaging		Chair: John Cotterill
16:50	The potential role of dual-energy CT within The Christie proton beam therapy service?	Matthew Clarke
17:05	Acquisition of integrated-mode proton radiographs in clinical beam lines?	Mikaël Simard
17:20	Predicting internal anatomical change from planar radiographs using deep learning for image-guided paediatric abdominal proton therapy	Ana-Cristina C Ghica
17:35	Discussion	
17:50	Wrap up and info on travelling to restaurant	
19:00	Dinner at The Kings Head	

Day 2 : 10th November 2023

Time	Title	Speaker
08:30	Arrival, registration and (limited) breakfast	
Session 7: Clinical trials and QA		Chair: Catharine Clark
09:00	Update talk: Current status of UK PBT clinical trials'	Lee Harrison-Carey
09:20	Optimisation of QA procedures for scanned proton beams	Loïc Grevillot
09:35	Characterisation of 3D-printable thermoplastics for proton therapy	Mariana Bento
09:50	Discussion	
10:10	Coffee break	
Session 8: Proton therapy in the clinic / treatment planning		Chair: Tony Lomax
10:30	Invited talk: Proton therapy: The Swiss Army Knife of radiotherapy?"	Tony Lomax
10:55	Interactive dose modification: a novel approach to proton therapy treatment planning	Mat Lowe
11:10	Theoretical evaluation of a Sawtooth PAT planning algorithm across multiple treatment sites	Sam Burford-Eyre
11:25	Update talk: Radiotherapy & Artificial Intelligence – promises and challenges	Catarina Veiga
11:45	Discussion	
12:05	Lunch	
12:50	Networking and Posters	
Session 9: Novel proton deliveries		Chair: Hugo Palmans
13:20	Invited talk: Distinct spatio-temporal dose delivery methods in proton therapy and their impact on biological response	Yolanda Prezado
13:45	Assessing the suitability of AAPM TG 224 tolerances for Pencil Beam Scanned proton FLASH deliveries: Robustness of dose rate distributions	Jack Aylward
14:00	Development of a Transmission Calorimeter for UHDR beam monitoring	Sam Flynn
14:15	The Fibre Optic Flash Monitor (FOFM): a novel detector for real-time dosimetry and monitoring at ultrahigh dose rates	Joseph Bateman
14:30	Fit for FLASH: Are the radiation protection provisions of existing centres suitable for ultra-high dose rate FLASH proton beams	Michael Taylor
14:45	Discussion	
15:05	Coffee break	
Session 10: Horizon scanning		Chair: Richard Amos
15:25	Update talk: The case for Helium ion beam radiotherapy	Oliver Jäkel
15:45	Beam delivery and patient alignment: perspective of the innovative normandy hadrontherapy (NHA) C400IONS multi-ion system	Virgile Letellier
16:00	Design and Integration of the Laser-hybrid Accelerator for Radiobiological Applications (LhARA)	William Shields
16:15	Update talk: Boron Neutron Capture Therapy: an update on developments around the World and particularly in Birmingham	Stuart Green / Ben Phoenix
16:35	Discussion	
16:55	Wrap-up and goodbye	

Invited talks = 25min (22min + 3min questions)

Update talks* = 20min (17min + 3min questions)

Abstract talks = 15min (12min + 3min questions)

*Session 1 update talks = 15min with dedicated question session at 10:00