AGENDA FOR THE

EUROPEAN RAYSTATION USER MEETING

NOVEMBER 19–20, 2020 | STARTING AT 09:00 CET

RaySearch Laboratories

THURSDAY, NOVEMBER 19

09:00 –09:10	Welcome to the 9th RayStation User Meeting	*Peter Kemlin, Director of Sales and Marketing*
09:10–09:45	RayStation 2020 and beyond	*Emil Ekström, RayStation Chief Functionality Owner; Bonnie Godyn, Clinical Specialist*
09:45–10:45	RaySearch research update	*Kjell Eriksson, Chief Science Officer*
10:45–11:15	RaySearch machine learning update	*Fredrik Löfman, Head of Machine Learning*
11:15–11:30	RayStation licencing	*Peter Kemlin, Director of Sales and Marketing*
11:30–12:00	Round table discussion between RayStation users and development, research and machine learning specialists from RaySearch	
12:00–13:00	**LUNCH BREAK**	
	PARALLEL BREAKOUT SESSIONS	
	Proton therapy	Photon therapy planning
13:00–13:25	Using Siemens DECT (SPR) images for dose computation in RayStation. *Nils Peters, MSc, PhD student, OncoRay - Center for Radiation Research in Oncology*	Robust optimisation for SABR lung planning. *Zoe Walker, Clinical Scientist, University Hospital Coventry*
13:25–13:45	Commissioning a synchrotron-based proton therapy system in RayStation. *Juan Diego Azcona, Director of Proton Therapy Physics, Clínica Universidad de Navarra*	Enabling remote planning with RayStation in a hurry: A response to the COVID-19 pandemic. *Dualta McQuaid, Clinical Physicist, Royal Marsden NHS Foundation Trust*
13:45–14.05	Assessing the robustness tool in protontherapy. *Maëva Vangvichith, Medical Physicist, Nice - Institut Méditerranéen de Protonthérapie*	Scripting with RayStation - From simulation to patient QA. *Marie-Hélène Mercier, Medical Physicist, ICB Chalon-sur-Saône*
14:05–14:25	Clinical validation of GPU Monte Carlo proton dose calculation algorithm. *Francesco Fracchiolla, Medical Physicist, Trento - Protonterapia*	Commissioning and validation of Ray Station Monte Carlo photon dose engine V1.3 at University Hospital Heidelberg. *Bernhard Rhein, PhD, Medical Physicist, Heidelberg University Hospital*
14:25–14:40	Live Q&A	Live Q&A
14:40–15:00	**BREAK**	
	PARALLEL BREAKOUT SESSIONS	
	Adaptive and deformable	Innovation in planning
15:00–15:25	Clinical evaluation of automated adaptive proton therapy workflow using contour propagation and dose evaluation. *Vicki T. Taasti, Medical Physicist, Maastro*	Clinical experience of MR-only radiation therapy for prostate cancer. *Jonathan Wyatt, PhD Fellow, Clinical Scientist, Northern Centre for Cancer Care, Newcastle upon Tyne Hospitals NHS Foundation Trust*
15:25–15:45	Commissioning of CBCT-based dose calculation in RayStation. *Rune Slot Thing, Medical Physicist, PhD, Department of Medical Physics, Vejle Hospital*	Radiation treatment uncertainties: Robust evaluation and optimization. *Roel G.J. Kierkels, Medical Physicist, PhD, UMCG*
15:45–16.05	Deformable image registration and EQD2 plan optimization for reirradiation of pelvis and brain (STRIDeR project). *Ane Appelt, PhD, Associate Professor, Medical Physicist, Leeds Cancer Centre*	Halcyon planning with RayStation. *Thomas Lacornerie, Head of Medical Physics, Centre Oscar Lambret*
16:05–16:20	Live Q&A	Live Q&A
16:20 –16:30	**BREAK**	
16:30 –17:00	Proton Therapy: Going live with RaySearch	*Prof. Tom Depuydt, Head of Physics; Anneleen Goedgebeur, Medical physicist; Jan Verstraete, Quality Manager; Tim Van Deyck, IT-coordinator, Clinic University Hospital Leuven*

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FRIDAY, NOVEMBER 20

09:00 –09:10	RaySearch development update	*Peter Kemlin, Director of Sales and Marketing; Bonnie Godyn Clinical Specialist*
09:10–09:30	Brachytherapy	*Elin Zambeaux, Brachytherapy Functionality Owner*
09:30–09:50	Multi met planning - future improvements	*Cecilia Battinelli, Researcher*
09:50–10:10	Proton planning with Machine Learning	*Mats Holmström, Machine Learning Engineer*
10:10–10:30	Cyberknife planning	*Anna Lundin, RayStation Technical Lead*
10:30–10:50	Ray Intelligence	*Fredrik Löfman, Head of Machine Learning*
10:50–11:10	RayTreat with Varian TrueBeam	*Rickard Holmberg, RayCommand Chief Functionality Owner*
11:10–11:30	RayCare and RayCare Flow	*Eeva-Liisa Karjalainen, RayCare Chief Functionality Owner*
11:30–12:00	Live discussions in chat rooms on the above topics	
12:00–13:00	**LUNCH BREAK**	
	PARALLEL BREAKOUT SESSIONS	
	Photon and electron beam modeling	Planning like a pro – Dosimetry
13:00–13:25	Assessment and improvement of MLC models based on synchronous and asynchronous sweeping gap tests. *Jordi Saez, Department of Radiation Oncology, Hospital Clínic de Barcelona, and Victor Hernandez, Department of Medical Physics, Hospital Universitari Sant Joan de Reus*	IMC Planning at Worcestershire Oncology Centre. *Heather Brown, Lead Dosimetrist, Worcestershire Oncology Centre*
13:25–13:45	Validation and clinical implementation of the Raystation Electron Monte Carlo Code. *Geert Pittomvils, Medical Physicist, PhD, Ghent University Hospital*	Proton planning experiences with the Mevion Hyperscan. *Rik Emmah,Radiation Therapy Technologist, Maastro*
13:45–14.05	RayStation at the National Physical Laboratory – current and future opportunities for research and development. *Mohammad Hussein, PhD, Senior Research Scientist, Medical Radiation Physics, National Physical Laboratory*	Abdominal radiation of pediatric patients, challenges in changing volume/cross-section. *Morten E. Evensen, Radiation Therapist, Oslo Universitetssykehus*
14:05–14:25	Patient Plan Verification of the new O-ring system (Halcyon™): Validation of Raystation versus portal imaging and ionization chamber array. *Daniel Nguyen, Medical Physicist, Radiotherapy Center of Mâcon*	Challenging plans versus planning challenges. *David Stewart, Radiation Therapist, Nelune Comprehensive Cancer Centre*
14:25–14:40	Live Q&A	Live Q&A
14:40–15:00	**BREAK**	

	IMPLEMENTING MACHINE LEARNING SESSION	
15:00–15:20	Clinical implementation and early experience of Deep learning segmentation.	*Andreas Johansson, Medical Physicist, Mälarsjukhuset*
15:20–15:40	Clinical implementation and validation of deep learning segmentation in RayStation.	*Michael G. Nix, PhD, Medical Physicist, Leeds Cancer Centre*
15:40–16.00	Automatic planning VMAT and robust IMPT in head and neck cancer patients.	*Erik W. Korevaar, PhD, Medical Physicist, UMCG*
16:00–16:20	Live Q&A	

ADVANCING CANCER TREATMENT

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