Automation in Radiotherapy Treatment Planning
Thursday 29th June 2023 – Sheffield
Morning

Session 1	**Introduction and Planning**
10:00 - 10:05	**Welcome**
10:05 - 10:25	Results of Survey
10:25 - 11:05	Automated Treatment Planning -- Past, Present and Future
	Sebastiaan Breedveld, Erasmus MC Cancer Institute
11:05 - 11:20	**Coffee**
Session 2	**Radiotherapy SIG**
11:20 - 11:30	Taking automated radiotherapy planning to the next level: automated batch planning via scripting
	Joshua Kirby, The Newcastle upon Tyne Hospitals NHS Foundation Trust
11:30 - 11:40	Creation of a Deep Learning treatment planning model based on CHHiP trial
	Timothy Atkins, Royal United Hospitals NHS Foundation Trust

11:40 - 11:50	Knowledge-based planning site by site implementation process
	Miranda Frizzelle, University College London Hospital
11:50 - 12:10	Panel Session (Speakers 1,2,3)
12:10 - 12:20	An assessment of the accuracy of the organ at risk contours for five commercial AI contouring solutions
	Paul Doolan, German Oncology Center
12:20 - 12:30	Evaluating the Safety and Utility of Auto-Segmentation Software using ProKnow
	Alexandra Constantinou, Cambridge University Hospitals
12:30 - 12:40	Panel Session (Speakers 4,5)
12:40 - 13:30	**Lunch + Poster Session**

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Session 3	Clinical and Scientific Computing SIG
13:30 - 14:00	Advancements and Integration: Exploring the Evolution of Automation in Radiotherapy Treatment Planning
	Gary Bee, GenesisCare Cancer Care UK Ltd
14:00 - 14:10	The evolution of the clinical treatment planning system scripting service over 7 years at the NCCC
	Joshua Kirby, The Newcastle upon Tyne Hospitals NHS Foundation Trust
14:10 - 14:20	Scripting with Varian's ESAPI: The Beginner's Experience
	Glen Whitten, Northern Ireland Cancer Centre, Belfast City Hospital
14:20 - 14:30	Panel Session (Speakers 6,7)
14:30 - 14:50	Coffee

Session 4 - RT SIG	
14:50 - 15:05	Automation within the Prostate Brachytherapy Workflow
	George Kirby, East and North Hertfordshire NHS Trust - Mount Vernon Cancer Centre
15:05 - 15:20	Development, evaluation and widespread implementation of Pareto navigation guided automated planning in the clinic
	Philip Wheeler, Velindre NHS University Hospital Trust
15:20 - 15:50	Interactive Session/Debate
	Scripting: Efficiencies and Risk - is it Worthwhile Overall?
15:50 - 16:00	Round Up Session
16:00	Meeting Close

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Posters

Virginia Marin Anaya - A geometric analysis of Brainlab auto-contouring software for proton treatment planning of brain tumours

Matthew Jones - Feasibility of a simple KBP planning tool for head and neck radiotherapy planning

Marcus Tyyger - Automating 4D Manual Delineation Treatment Pathways

Marcus Tyyger - Reducing Region of Interest Export Errors Through Automation

Jack Miskell - Evaluation and clinical implementation of deep learning auto-segmentation across all clinical sites

Simon Temple - Failure rates and Quality Assurance of commercial AI auto-segmentation systems for head and neck cancer

Anna Vella - Automated Clinical Treatment Planning: from manual to auto-planning in Clinical Practise to reduce the patient pathway.

Ben Harris - Implementing an automated treatment plan checking script

Gavin Orchin - Automated Prostate Planning with ESAPI Scripting and RapidPlan

Ruairidh Howes - Automating the recalculation of clinical SABR treatment plans in an independent TPS to provide 3D dose evaluation at plan check

Samuel Ingram - An overview of treatment planning automation used for proton beam therapy at The Christie

Philip Wheeler- Comprehensive dosimetric evaluation of a CT scanner based deep learning auto-contouring solution for prostate radiotherapy

Megan Barrell - Assessing plan quality in the 'PLATO anal cancer trial 5' pilot phase with automated planning

Henry Carver - Automated Optimisation Structure Generation for Head and Neck Radiotherapy Planning

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