



Online event 'Proton Therapy in the Netherlands' Dutch circle of medical physicists (NVKF-RKF)

4th of March, Clinical

13:30 to 15:00

Chair: Mischa Hoogeman

Co-chair: Charlotte Brouwer

Update on current practice

1. GPTC: Jeffrey Free: Overview of proton therapy in the Netherlands
2. HPTC: Anne Lisa Wolf: Treatment of Chordoma: opportunities and challenges
3. MaastrroPTC: Richard Canters: Clinical introduction of proton therapy for oesophageal cancer
4. GPTC: Gabriel Guterres Marmitt: Implementation of Log-based plan QA within the Captain platform
5. HPTC: Kees Spruijt: Commissioning of and first experience with ocular proton therapy (may be also include inter-institute beamline comparison of Emma Fleury)
6. GPTC: Cassia Oraboni Ribeiro: Clinical 4D evaluation workflow for thoracic indications

4th of March, Research

15:15 to 16:30

Chair: Frank Verhaegen

Co-chair: Jérémy Schiphof-Godart

Adaptive proton therapy and treatment planning

7. HPTC: Thyrsa Jagt: Automated online adaptive proton therapy
8. MaastrroPTC: Elena Borderías Villarroel: Towards online adaptive proton therapy: the opportunity for dose restoration
9. GPTC: Adrian Thummerer: Synthetic CT based dose calculations in Proton Therapy
10. HPTC: Laura Bogers: Reconstruction of cardiac dose and target coverage for left-sided breast irradiation with and without internal mammary nodes for two photon and one proton technique
11. HPTC: Steven Habraken: The role of fractionation in stereotactic transmission-beam FLASH proton therapy of lung cancer

10th of March, Clinical

9:30 to 11:00

Chair: Stefan Both

Co-chair: Ilaria Rinaldi

Robust optimization and evaluation in clinical practice:

1. GPTC: Erik Korevaar: Robust planning and robustness evaluation in clinical practice
2. HPTC: Jesús Rojo-Santiago: Accurate assessment of a Dutch practical robustness evaluation protocol in clinical IMPT for neurological tumors
3. MaastrichtPTC: Vicki Taasti: 4D robust evaluation for lung patients with tumor movement larger than 5 mm

Treatment delivery:

4. GPTC: Daniel Scandurra: Experience with offline adaptive proton therapy in Head and Neck
5. MaastrichtPTC: Mirko Unipan: Automated adaptive proton therapy workflow
6. HPTC: Hansjoerg Wertz: Commissioning in-room CT on rails system in a proton therapy gantry

10th of March, Research

11:15 to 12:30

Chair: Mischa Hoogeman

Co-chair: Arjen van der Schaaf

Equipment and QA

7. HPTC: Jan Willem Beenakker: MR imaging for ocular proton therapy
8. GPTC: Arturs Meijers: Predicted outcomes based patient specific quality assurance
9. HPTC: Marta Rovituro: The R&D beam line of HollandPTC

Model based approach

10. THINC, Utrecht: Ewoud Schuit: model selection and validation

16th of March, Clinical

9:30 to 10:30

Chair: Stefan Both

Co-chair: Jérémy Schiphof-Godart

Model based approach and referrals

1. MaastrichtPTC: Liesbeth Boersma: First experience with national indication protocols: procedures, patient selection, and referrals
2. GPTC: Arnout van der Borden: Logistics in treatment of pediatric patients, IT infrastructure Utrecht-Groningen

Automated treatment planning

3. HPTC: Jasper Kouwenberg: Model-based patient pre-selection for intensity-modulated proton therapy (IMPT) using automated treatment planning and machine learning
4. GPTC: Ilse van Bruggen: Machine learning based auto-planning for robust proton therapy

16th of March, Research

Chair: Frank Verhaegen

Co-chair: Arjen van der Schaaf

11:15 to 12:45

Monte Carlo implementation

5. MaastrichtPTC: Ilaria Rinaldi: A GPU Monte Carlo code to support clinical proton therapy routine and its application to log-file based patient QA

LET/RBE

6. HPTC: Marleen van Doorn: The increased risk of post-treatment contrast-enhancing brain lesion in IMPT of low-grade glioma, and the mitigation thereof in treatment planning
7. GPTC: Dirk Wagenaar: Challenges in the clinical implementation of the LET/RBE concept

Imaging, range verification and inter-fraction motion robustness

8. MaastrichtPTC: Gabriel Paiva Fonseca: Role of dual energy CT in extracting SPR for accurate proton range
9. GPTC: Carmen Seller Oria: Proton radiography for range verification
10. GPTC: Elske Gort – Inter-fraction motion robustness in cervical cancer