Program Tuesday, October 5, 2021

12:30-13:00 Registration

13:00-14:00 Lunch

14:05-14:10 Welcome

14:10-15:15 Session 1: Radiobiology and late effects

Moderators: Turid Hellevik (UNN) and Sissel Hauge (OUS)

14:10-14:30 **Inigo Martinez, UiT**: Radiobiology research in Northern Norway

14:30-14:45 **Ingunn Hanson, UiO**: The role of TGF-β3 in modification of radiation response

14:45-15:00 **Inga Solgård Juvkam, UiO**: A murine model for investigating normal tissue injury following radiotherapy of the head and neck

15:00-15:15 **Thuy-Tien Maria Huynh, OUS**: Late effects in head and neck cancer survivors

15:15-15:45 Coffee

15:45-17:00 Session 2: Imaging and AI

Moderators: Kathrine Røe Redalen (NTNU) and Karsten Rydén-Eilertsen (OUS)

15:45-16:00 **Vilde Eide Skingen, OUS:** Hypoxia-related classification based on histological features of prostate cancer biopsies

16:00-16:15 **Øyvind Rørtveit, HUS**: A deformation model for the rectum using Bayesian inference

16:15-16:30 **Rene Winther, NTNU**: Streamlining the use of PET/MRI in an MR-only radiotherapy workflow

16:30-16:45 **Aurora Rosvoll Grøndahl, NMBU**: Deep learning-based automatic delineation of anal cancer gross tumour volume: A multimodality comparison of CT, PET and MRI

16:45-17:00 **Taran Paulsen Hellebust, OUS:** Feasibility of a hybrid deformable image registration (DIR) in dose tracking workflow for image-guided radiotherapy of cervical cancer treatment

17:00-17:30 Coffee

17:30-18:30 Session 3: Protons

Moderators: Camilla Stokkevåg (HUS) and Eric Sundquist (OsloMet)

17:30-17:45 **Nina Edin, UiO**: Proton radiobiology studies at Oslo Cyclotron Laboratory

17:45-18:00 **Anna Gullhaug, OsloMet**: Intensity modulated proton therapy planning in left-sided breast cancer patients with pectus excavatum

18:00-18:15 **Camilla Grindeland Boer, HUS**: Optimization techniques for pencil beam scanning proton therapy (PT) of locally advanced non-small cell lung cancer (LA-NSCLC): organ at risk (OAR) sparing and robustness

18:15-18:30 **Tord Hompland, OUS**: Biological imaging to identify patients that can benefit from proton therapy

18:30-18:40 End of day wrap-up

18:40-19:30 Break

19:30- Conference dinner