

28th INTERNATIONAL CONFERENCE ON MEDICAL IMAGE **COMPUTING AND COMPUTER ASSISTED INTERVENTION**

From Concept to Clinical | Pan-Asian Connection

The 4^{th} Workshop on Computational Mathematics Modeling in Cancer **Analysis**

DCC1- Room 2F-204

Session 1 Title: Keynote Session

Session Chairs: Chao Li, Wenjian Qin, Jia Wu, Nazar Zaki

Time **Paper Title**

13:30-13:45 Open Remarks

13:45-14:20 **Keynote:** Computational Modeling of Breast Cancer Images: From Heuristics to Biology

Prof. Shandong Wu, University of Pittsburgh

14:20-14:55 **Keynote:** Towards Generalizable Multi-Omics Modeling for Radiation Therapy

Prof. Jing Cai, Hong Kong Polytechnic University

14:55-15:30 **Keynote:** Cone-beam CT Intelligent Imaging for Radiation Oncology

Prof. Tianye Niu, University of Science and Technology of China

15:30-16:00 Coffee Break

Session 2 Title: Oral Session Session Chairs: Wenjian Qin

Paper Title Time

16.00-16:20 **Oral 1 - Jonas Weidner**

A Lightweight Optimization Framework for Estimating 3D Brain Tumor Infiltration

16:20-16:40 Oral 2 - Valentin Septiers

> A data-driven approach to optimise parameters of a computational digital twin model in response to SBRT on MR-Linac

16:40-17:00 Oral 3 - Anran Liu, Xiaofei Wang

Score-based Diffusion Model for Unpaired Virtual Histology Staining

17:00-17:20 **Oral 4 - Xueren Zhang**

CT Image Segmentation Using Frequency Domain Feature-Assisted Selective Long Memory

State Space Model

17:20-17:40 Oral 5 - Xidong Wu, Hao Chen

OG-SAM: Enhancing Multi-Organ Segmentation with Organogenesis-Based Adaptive

Modeling

Oral 6 - Guantian Huang 17:40-18:00

Region-aware Diagnosis of Clinically Significant Prostate Cancer via Semi-supervised Learning

Segmentation