

# Conference Agenda

## Session

### SES-06: Reconstruction, Algorithms and Optimization I

*Time:* Thursday, 06/Feb/2025: 10:50am - 12:30pm

## Presentations

#### **From Uncertainty to Calibration: Online Pose Estimation of an Industrial Twin Robotic Computed Tomography System with Unknown Fiducials**

**Niklas Handke<sup>1</sup>, Yiqun Q. Ma<sup>2</sup>, Anton Weiss<sup>1</sup>, Simon Wittl<sup>1</sup>, Gabriel Herl<sup>1</sup>**

<sup>1</sup>Deggendorf Institute of Technology; <sup>2</sup>Johns Hopkins University

#### **Surface fitting of geometric defects in CT scans of lattice structures**

**Dorian BICHET<sup>1,2</sup>, Robin BOUCLIER<sup>1,2</sup>, Jean-Charles PASSIEUX<sup>2</sup>, Jean-Noël PERIE<sup>2</sup>**

<sup>1</sup>Institut de Mathématiques de Toulouse, France; <sup>2</sup>Institut Clément Ader, France

#### **Compensating Sparse-view Inline Computed Tomography Artifacts with Neural Representation and Incremental Forward-Backward Network Architecture**

**Manuel Buchfink<sup>1</sup>, Faizan Ahmad<sup>1</sup>, Guangpu Yang<sup>1</sup>, Charles Clark<sup>1</sup>, Ahmed Baraka<sup>2</sup>, Xingyu Liu<sup>1</sup>, Sven Simon<sup>1</sup>**

<sup>1</sup>Department of Computational Imaging Systems, ITI, University of Stuttgart, Germany; <sup>2</sup>RWTH Aachen University, Campus-Boulevard 30, 52074 Aachen, Germany

#### **Improving CT reconstructions of multi-material assemblies by multi-position data fusion: a case study**

**Javier Sánchez Prieto, Filippo Zanini, Simone Carmignato**

University of Padova, Italy

#### **An Adaptive View Selection Algorithm for Practical Cone-Beam CT Reconstruction**

**Jingsong Lin<sup>1</sup>, Singanallur Venkatakrishnan<sup>2</sup>, Obaidullah Rahman<sup>2</sup>, Gregery Buzzard<sup>1</sup>, Amirkoushyar Ziabari<sup>2</sup>, Charles Bouman<sup>1</sup>**

<sup>1</sup>Purdue University, United States of America; <sup>2</sup>Oak Ridge National Lab, United States of America