

Day 2, Tuesday 17, 2019, 25th Inverse Days, Jyväskylä

8:45 – 9:00 *Registration (1st floor lobby)*

| | Wivi | Alvar |
|-------|--|--|
| 9:00 | Luca Ratti | Emilia Blåsten |
| 9:25 | <i>A Convolutional Neural Networks approach for sparsity-promoting regularization in CT: theoretical results</i> | <i>Detecting blockages in water supply networks using boundary control</i> |
| 9:25 | Mathilde Galinier | Leyter Potenciano-Machado |
| 9:50 | <i>Unrolled ISTA and convolutional neural networks for limited-angle tomography reconstruction</i> | <i>A resolvent estimate for the magnetic Schrödinger operator in the presence of short and long-range potentials</i> |
| 9:50 | Jalo Nousiainen | Shiqi Ma |
| 10:15 | <i>Inverse problems and deep learning in predictive control for adaptive optics</i> | <i>Determining a random Schrödinger equation</i> |

10:15 – 10:45 *Coffee (restaurant)*

| | Wivi |
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| 10:45 | Marco Mazzucchelli |
| 11:10 | <i>Spectral characterizations of Besse and Zoll Reeb flows</i> |
| 11:10 | Tuomo Valkonen |
| 11:35 | <i>First-order primal-dual methods for non-linear inverse problems</i> |
| 11:35 | Yavar Kian |
| 12:00 | <i>Inverse problem for diffusion equations</i> |

12:00 – 13:00 *Lunch (restaurant)*

12:00 – 13:30 *Women in Inverse Problems (cabinet)*

| | Wivi | Alvar |
|-------|--|--|
| 13:30 | Lauri Ylinen | Otto Lamminpää |
| 13:55 | <i>Analysis of a Dynamical System Modelling Lasers and Applications for Optical Neural Networks</i> | <i>UQ for satellite measurements of CO₂ using MCMC</i> |
| 13:55 | Rahul Yadav | Vesa Kaarnioja |
| 14:20 | <i>Deep convolutional neural networks for estimating porous material properties using microwave tomography</i> | <i>Uncertainty quantification for PDE-constrained optimal control problems using quasi-Monte Carlo methods</i> |
| 14:20 | Andreas Hauptmann | Bjørn Christian Skov Jensen |
| 14:45 | <i>Learned image reconstruction for large scale tomographic imaging</i> | <i>Wave speed uncertainty in Acousto-Electric Tomography</i> |

14:45 – 15:15 *Coffee (restaurant)*

| | Wivi |
|-------|--|
| 15:15 | François Monard |
| 15:40 | <i>The geodesic X-ray transform on disks of constant curvature</i> |
| 15:40 | Rashmi Murthy |
| 16:05 | <i>Classification of the stroke using Neural Networks in Electrical Impedance Tomography</i> |

16:10 – 17:30 *FIPS meeting*

18:30 *Transportation to dinner (in front of Paviljonki)*

19:00 *Dinner (Scandic Hotel Laajavuori)*

22:00 *Transportation from dinner (in front of dinner venue)*