

Day 3, Wednesday 18, 2019, 25th Inverse Days, Jyväskylä

	Wivi	Alvar
9:00	Samuli Siltanen	Giovanni Covi
9:25	<i>Gray-box machine learning for electrical impedance tomography</i>	<i>An inverse problem for the fractional Schrödinger equation in a magnetic field</i>
9:25	Ville Kolehmainen	Nataliia Kinash
9:50	<i>Non-linear difference reconstruction method for monitoring of cerebral haemorrhage</i>	<i>An inverse problem for a generalized fractional derivative with an application in reconstruction of time- and space-dependent sources in fractional diffusion and wave equations</i>
9:50	Aynur Cöl	Fredrik Hildrum
10:15	<i>Deep Learning based Virtual Hybrid Edge Detection Method in Electrical Impedance Tomography for Stroke Classification</i>	<i>Nonlinear Lavrentiev regularization of monotone ill-posed equations</i>

10:15 – 10:45 *Coffee (restaurant)*

	Wivi	Alvar
10:45	Valentina Candiani	Petri Kuusela
11:10	<i>Monotonicity-based reconstruction of extreme inclusions in electrical impedance tomography</i>	<i>Imaging of moisture flows in cement-based materials using X-ray computer tomography and electrical capacitance tomography</i>
11:10	Guanghui Liang	Teemu Sahlström
11:35	<i>Shape-based image reconstruction of electrical/ultrasonic dual-modality tomography</i>	<i>Modelling of errors due to uncertainties in ultrasound sensor locations in photoacoustic tomography</i>
11:35	Henrik Garde	Rasmus Backholm
12:00	<i>Optimal depth-dependent distinguishability bounds for EIT</i>	<i>Simultaneous Reconstruction of Emission and Attenuation in Passive Gamma Emission Tomography of Spent Nuclear Fuel</i>

12:00 – 13:15 *Lunch (restaurant)*

	Wivi	Alvar
13:15	Matteo Santacesaria	Teemu Saksala
13:40	<i>Infinite-dimensional inverse problems with a finite number of measurements</i>	<i>Generic uniqueness and stability for mixed ray transform</i>
13:40	Topi Kuutela	Tommi Brander
14:05	<i>Developments on the logarithmic forward map of electrical impedance tomography</i>	<i>1D source detection with multiple frequencies</i>

14:05 – 14:35 *Coffee (restaurant)*

	Wivi
14:35	Lauri Oksanen
15:00	<i>The light ray transform in stationary and static Lorentzian geometries</i>
15:00	Matti Lassas
15:25	<i>New deep neural networks solving non-linear inverse problems</i>

15:25 – 15:35 *Ending*