## 4 TU.AMI



**MATHEMATICS FOR INNOVATION** 

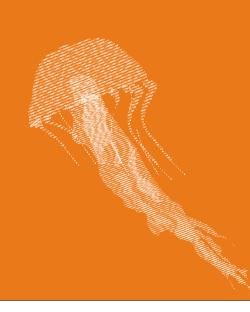
**Registration before 28 October** http://registration-ami-conference.nl

More information: www.4tu.nl/ami/en

## **TU Delft, Science Centre**

TU Delft, Mijnbouwstraat 120, 2628 RX Delft.

Program committee: Remco Duits Arnold Heemink Johannes Schmidt-Hieber Willem Kruijer



## MATHEMATICS OF DEEP LEARNING 5 November 2019

09:00 - 09:25	Registration and coffee
09.25 - 09:30	Opening by Kees Vuik
09.30 — 10:10	Estimation ability of deep learning with connection to sparse estimation in function space Taiji Suzuki – Department of Mathematical Informatics, University of Tokyo
10.10 — 10.50	Learned SVD - Deep Learning Decomposition for Inverse Problems Christoph Brune – Department of Applied Mathematics, University of Twente
10:50 - 11.20	Coffee break
11:20 - 12:00	Physics Inspired Deep Learning Methods Max Welling. Institute of Informatics, University of Amsterdam
12:00 - 12:20	Deep limits of residual neural networks Yves van Gennip, Delft Institute of Applied Mathematics, Delft University of Technology
12:20 — 12:40	Group Equivariant CNNs beyond Roto-Translations: B-Spline CNNs on Lie Groups Erik Bekkers, Department of Mathematics and Computer Science, Eindhoven University of Technology
12:40 — 13:30	Lunch break
13:30 – 14:10	Implicit bias and regularization in machine learning Lorenzo Rosasco, Laboratory for Computational and Statistical Leaning, Massachusetts Institute of Technology.
14:10 — 14:50	Diffusion Variational Autoencoders Jim Portegies, Department of Mathematics and Computer Science, Eindhoven University of Technology
14:50 — 15:20	Tea break
15:20 — 16:00	Approximation with sparsely connected deep networks Remi Gribonval, Centre de Recherche INRIA Rennes
16:00 — 16:20	Gauge Equivariant Convolutional Networks Taco Cohen, Institute of Informatics, University of Amsterdam
16:20 — 16:40	PDE-based CNNs with Morphological Convolutions Bart Smets, Department of Mathematics and Computer Science, Eindhoven University of Technology
16:40	Closure + drinks





