MATHEMATICS OF DEEP LEARNING
5 November 2019

TU Delft, Science Centre
TU Delft, Mijnbouwstraat 120, 2628 RX Delft.

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

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 – 12:40   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 Learning, 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
René Giraud, Centre de Recherche INRIA Rennes
16:00 – 16:20   Gauge Equivariant Convolutional Networks
Sax Cohin, 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

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

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