

18 September 2019

9.00 am - 18.00 pm



MINES ParisTech
60 bd Saint-Michel

DATA science DAY

Organized by the Department Mechanical and Materials Engineering of MINES ParisTech

Information MINES ParisTech Sophia Antipolis : Elie HACHEM (CEMEF)

9.00-9.30

Direction MINES ParisTech - Accueil et introduction

9.30-10.15



Prof. Charbel Farhat Stanford University
A Physics-Based Alternative Approach to Digital Twins

10.15-10.30

Etienne Decencière Centre for Mathematical Morphology (CMM)
Department of Mathematics and systems
Convolutional neural networks and mathematical morphology for biomedical image analysis

10.30-10.45

Hervé Chauris Centre of Geosciences
Department Earth sciences and environment
Imaging with large seismic data sets

10.45-11.00

Philippe Blanc Centre Observation, Impacts, Energy (O.I.E.)
Department Energy and processes
Signal and Image processing of Earth observation for solar short term forecasting

11.00-11.15

Pascal Le Masson Centre for Management Science (CGS)
Department of Economics, Management, Society
Data science and design theory: beyond modelling & optimizing, the generativity logic in stats & AI

11.15-11.30

Chloé-Agathe Azencott Centre for Computational Biology (CBIO)
Department of Mathematics and Systems
Biomarker discovery for precision medicine

11.30-11.45

Fabien Moutarde Robotics Center (CAOR)
Department of Mathematics and Systems
Deep Reinforcement Learning for Autonomous Vehicles & Robotics

11.45-12.30



Dir. Rech. Marc Schoenauer INRIA Saclay
Sciences des données: validation, certification, transparence, et impacts sur la société

12.30-13.30 LUNCH BREAK

afternoon - après-midi



13.30-14.15



Prof. Francisco Chinesta ENSAM ParisTech
Data-Driven Empowered Physics-Based Models

14.15-14.30

Jonathan Viquerat, Elie Hachem Centre for material forming (CEMEF)
Department of Mechanical and Materials engineering
Deep Reinforcement Learning for fluid mechanics problems

14.30-14.45

Thomas Walter Centre for Computational Biology (CBIO)
Department of Mathematics and systems
Computer Vision for Bioimage Analysis

14.45-15.00

David Ryckelynck Centre of materials (CDM)
Department of Mechanical and Materials engineering
Transfer learning for hybrid modeling in mechanics of materials and structure

15.00-15.15

Bruno Figliuzzi Centre for Mathematical Morphology (CMM)
Department of Mathematics and systems
Fast marching based approach to image segmentation

15.15-15.30

Florent Di Meglio, Nicolas Petit Automatic control and systems Centre (CAS)
Department of Mathematics and systems
Assimilation of Experimental Data for Nonlinear Reduced Order Models

15.30-15.45 COFFEE BREAK

15.45-16.00

Véronique Stoven Centre for Computational Biology (CBIO)
Department of Mathematics and systems
Machine-learning chemogenomics for identification of drugs mechanism of action »

16.00-16.15

Xavier Freulon Centre of Geosciences
Department Earth sciences and environment
Random fields on Riemann Manifolds using Stochastic Partial Differential Equation (SPDE)

16.15-16.30

Céline Houriez Centre Thermodynamic of Processes
Department Energy and processes
Data Science for Molecular Simulation: some perspectives

16.30-16.45

Thomas Romary Centre of Geosciences
Department Earth sciences and environment
Sequential data assimilation: application to the hydro-biogeochemical model Prose

16.45-17.15



Prof. Jean-Philippe Vert Google AI
Learning from ranks and learning to rank

Invited Speakers

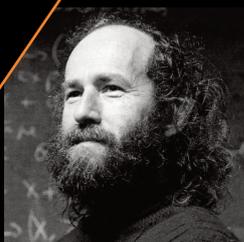
(in order of appearance)

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9.30-10.15

Pr. Charbel FARHAT
Stanford University



11.45-12.30

Dir. de Rech.
Marc SCHCENAUER
INRIA Saclay



13.30-14.15

Pr. Francisco CHINESTA
ENSAM ParisTech



16.45-17.15

Pr. Jean-Philippe VERT
Google AI