

GSI'17 - Geometric Science of Information

November 7th (Tue.) - 9th (Thu.) 2017, MINES PARISTECH, Paris, France

Registration & abstract submission www.gsi2017.org, Deadline: April 3rd 2017

Invited Honorary Speaker

Jean-Michel Bismut (Paris-Saclay University) - *The hypoelliptic Laplacian*

Guest Honorary Speaker

Daniel Bennequin (Paris Diderot University) - *Geometry and Vestibular Information*

Keynote Speakers

Alain Trouvé (ENS Cachan) - *Hamiltonian Modeling for Shape Evolution and Statistical Modeling of Shapes Variability*

Barbara Tumpach (Lille University) - *Riemannian Metrics on Shape Spaces of Curves and Surfaces*

Mark Girolami (Imperial College London) - *Riemann Manifold Langevin and Hamiltonian Monte Carlo Methods*



Sessions

- Statistics on Non-Linear Data
- Shape Space
- Optimal Transport & Applications I (Data Science and Economics) & II (Signal and Image Processing)
- Topology and Statistical Learning
- Statistical Manifold & Hessian Information Geometry
- Information Structure in Neuroscience
- Geometric Robotics & Tracking
- Geometric Mechanics & Robotics
- Stochastic Geometric Mechanics & Lie Group Thermodynamics
- Probability on Riemannian Manifolds
- Divergence Geometry
- Geometric Deep Learning
- First and Second-Order Optimization on Statistical Manifolds
- Non-Parametric Information Geometry
- Geometry of Quantum States
- Optimization on Manifold
- Computational Information Geometry
- Probability Density Estimation
- Geometry of Tensor-Valued Data
- Geometry and Inverse Problems
- Geometry in Vision, Learning and Dynamical Systems
- Lie Groups and Wavelets
- Geometry of Metric Measure Spaces
- Geometry and Telecom
- Geodesic Methods with Constraints
- Applications of Distance Geometry

