GSI'17 - Geometric Science of Information

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

Registration & abstract submission www.gsi2017.org , Deadline: April 24th 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*
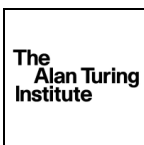
Keynote Speakers

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*
- *Monotone Embedding in 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*