GSI'15 - Geometric Science of Information

October 28th (Wed.)-30th(Fri.) 2015, Ecole Polytechnique, Paris-Saclay Campus
Registration: www.gsi2015.org

Keynote Speakers

C.M. Marle - Actions of Lie groups and Lie algebras on symplectic and Poisson manifolds

M. Arnaudon -Stochastic algorithms for computing generalized means in manifolds

T. Ratiu - Symmetry methods in geometric mechanics

M. Marcolli - From Geometry and Physics to Computational Linguistics

Topics

- *Manifold/Topology Learning*
- *Riemannian Geometry in Manifold Learning*
- *Optimal Transport theory and applications in Imagery/Statistics*
- *Shape Space & Diffeomorphic mappings*
- *Geometry of distributed optimization*
- *Random Geometry/Homology*
- *Hessian Information Geometry*
- *Topology and Information*
- *Information Geometry Optimization*
- *Divergence Geometry*

- *Optimization on Manifold*
- *Lie Groups and Geometric Mechanics / Thermodynamics*
- *Quantum Information Geometry*
- *Infinite Dimensional Shape spaces*
- *Geometry on Graphs*
- *Bayesian and Information geometry for inverse problems*
- *Geometry of Time Series and Linear Dynamical Systems*
- *Geometric structure of Audio Processing*
- *Lie groups in Structural Biology*
- *Computational Information Geometry*