Joint Structures and Common Foundation of Statistical Physics, Information Geometry and Inference for Learning

**26th July to 31st July 2020**


### 8 Lectures (90 min)
- **Langevin Dynamics:** Old and News (x 2) – Eric Moulines
- **Computational Information Geometry**
- **Divergence based Machine Learning** – Frank Nielsen
- **Non-Parametric and Orlicz Spaces** – Giovanni Pistone
- **Non-Equilibrium Thermodynamic Geometry**
  - A variational perspective of closed and open systems - François Gay-Balmaz
  - A Homogeneous Symplectic Approach - Arjan van der Schaft
- **Geometric Mechanics**
  - Galilean Mechanics & Thermodynamics of Continua - Géry de Saxcé
  - Souriau-Casimir Lie Groups Thermodynamics & Machine Learning – F. Barbaresco