Topics for Master Theses 2018

- Mangoubi/Smith: Rapid mixing of HMC
- Cheng/Chatterji/Bartlett/Jordan: Underdamped Langevin MCMC
- Protter/Qiu/San Martin: Asymptotic error distribution for Euler scheme with loc. Lip. coeff.
- Blanchet/Chen/Dong: eps-strong simulation via rough paths
- Ben Arous/Jagganath: Spectral gap estimates in mean field spin glasses
- Weed/Bach: Sharp asymptotic and finite sample rates of convergence of empirical measures in Wasserstein distance
- Andrieu/Ridgway/Whiteley: Sampling normalizing constants in high dimensions using inhomogeneous diffusions
- Durmus/Moulines/Pereyra: Efficient Bayesian estimation by proximal MCMC: When Langevin meets Moreau
- Lee/Vempala: Eldan's stochastic localization and the KLS hyperplane conjecture
- Wiljes/Reich/Stannat: Long-time stability and accuracy of the ensemble Kalman filter
- Gobet/Munos: Sensitivity analysis using Ito-Malliavin calculus and martingales
- Raginsky/Rakhlin/Telgarsky: Non-convex learning via stochastic gradient Langevin
- Abbasi/Yadkori/Bartlett/Gabillon/Malek: Hit-and-run and sampling/planning in non-convex domains
- Mangoubi/Smith: Geodesic walks
- Hammersley/Siska/Szpruch: McKean-Vlasov SDEs under measure dependent Lyapunov conditions
- Serfaty: Coulomb interactions
- Herzog/Mattingly: Lyapunov for singular potentials
- Kuksin/Nersesyan/Shirikyan: Exponetial mixing dor dissipative PDE with degenerate noise
- Reygner: Equilibrium large deviations for mean-field models