

# Program

## Monday

9:00	Registration and coffee
9:59	Opening
10:00	<i>Chair:</i> STEFAN GEISS
	ANDERS SZEPESSY : Stochastic differential equations derived from fundamental principles
11:00	Break
11:15	STEFAN HEINRICH : Randomized approximation of functions
12:15	Lunch
14:00	<i>Chair:</i> PIERRE DEL MORAL
	STEFFEN DEREICH : Rate allocation in quantization
15:00	Coffee
15:30	ARNE OGROWSKY : Discretization of a stable SPDE in space and time
16:00	Break
16:15	KLAUS RITTER : Non-uniform time discretization and lower bounds for stochastic heat equations
17:15	Break
18:00	Get together at SAHA

## Tuesday

9:00	<i>Chair:</i> VLAD BALLY
	EMMANUEL GOBET : Analytical pricing formulas for models with local volatilities and jumps
10:00	Coffee
10:30	MICHAL BARAN : Approximations for equations with Lévy noise
11:00	Break
11:15	ARTURO KOHATSU-HIGA : A semigroup approach for weak approximations with an application to infinite activity Lévy driven SDEs
12:15	Lunch
14:00	<i>Chair:</i> ANDERS SZEPESSY
	DAMIEN LAMBERTON : American option prices in an exponential Lévy model
15:00	Coffee
15:30	CHRISTOPH AISTLEITNER : Martingale approximation in metric discrepancy theory
16:00	Break
16:15	PIERRE DEL MORAL : A new class of interacting Markov Chain Monte Carlo methods
17:15	End

### Wednesday

9:00	<i>Chair:</i> BRUNO BOUCHARD
	ANTOINE LEJAY : Simulation of diffusion processes with discontinuous coefficients
10:00	Coffee
10:30	RAINER AVIKAINEN : Approximation of functionals of SDEs and application to a recent multilevel Monte Carlo method
11:00	Break
11:15	VLAD BALLY : Lower bounds for the probability that an Ito process stays in a tube
12:15	Lunch
14:00	STÉPHANE MENOZZI : Parametrix and local limit theorems for some degenerate diffusion processes
15:00	Coffee and break
17:30	Excursion and dinner
22:00	End

### Thursday

9:00	<i>Chair:</i> DAMIEN LAMBERTON
	BRUNO BOUCHARD : Stochastic target problems with controlled loss
10:00	Coffee
10:30	GEORGIOS AIVALIOTIS : Regularisation and viscosity approach for the mean-variance control problem
11:00	Break
11:15	STEFAN GEISS : On the approximation of BSDEs
12:15	Lunch
14:00	<i>Chair:</i> KLAUS RITTER
	FRANÇOIS DELARUE : Probabilistic analysis of the upwind scheme for transport
15:00	Break
15:15	HASSAN DOOSTI : Estimation of the survival function for a discrete-time stochastic process
15:45	Coffee
16:15	ANDREAS NEUENKIRCH : Numerical Methods for SDEs driven by Fractional Brownian Motion: Exact Convergence Rates
17:15	End

**Sauna organized by Esko Valkeila**

**Friday**

9:00	<i>Chair:</i> ARTURO KOHATSU-HIGA
	YULIYA MISHURA : The convergence rate for Euler approximations of solutions of SDEs driven by fractional Brownian motion and approximation schemes for SDEs in Hilbert space
10:00	Coffee
10:30	ANNI TOIVOLA : Interpolation and approximation in $L_p$
11:00	Break
11:15	ALEKSANDER VERETENNIKOV : On strong and weak approximations for SDEs
12:15	Closing