

**Annual meeting FNRS Graduate School “COMPLEX” & “Science of the Cities”**  
(registration is free but mandatory)

Wednesday the 13<sup>th</sup> May 2015

**Department of mathematics UNamur 8, rempart de la vierge, Namur, room E22 2<sup>nd</sup> floor**

**Program**

9h00-9h10 introduction to the meeting

9h10-10h00 **Claude Loverdo** (CNRS, LJP, Paris, France)

*Two examples of stochastic modeling for biology*

10h00-10h30 coffee break

10h30-12h30 short talks (12'+3' questions)

**Guillaume Lenoire** (Earth and Life Institute and Georges Lemaître Centre for Earth and Climate Research, UCL)

*Frequency and Continuous Time-Frequency Analysis for Irregularly Sampled Time Series and Significance Testing*

**Sarah De Nigris**, (naXys, Département de Mathématique, UNamur)

*Collective behaviours: the role of the network structure*

**Morgane Dumont** (naXys, Département de Mathématique, UNamur)

*Big data and privacy law : How to create a synthetic population for Belgium*

**Malbor Asllani**, (naXys, Département de Mathématique, UNamur)

*The theory of Turing patterns*

**Vanessa Loodts** (Nonlinear Physical Chemistry Unit, ULB)

*Chemical reactions can accelerate the development of dissolution-driven convection*

**Mickael Randour** (Institut Complexys, Département d'Informatique, UMon & CNRS LSV & ENS Cachan, France)

*Planning a journey in an uncertain environment: variations on the stochastic shortest path problem*

**Duc-Thanh Tran** (Physics of Complex Systems and Statistical Mechanics, ULB)

*Topological Hofstadter Insulators in a Two-Dimensional Quasicrystal*

**Devdutt Kulkarni** (Research Unit in Environmental and Evolutionary Biology, Unamur)

*Modelling the effects of toxicants on freshwater plankton*

12h30-14h00 lunch (offered but you must register, see below) & meeting of the Graduate School Steering committee

**14h00-17h00 “Sciences of Cities”**

14h00 – 14h50 **Marc Barthélemy** (Physics, CEA, France)

*New quantitative approaches to cities*

14h50 – 15h40 **Tassos Noulas** (Cambridge, UK, Computer Science)

*Tracking the Properties and Temporal Dynamics of Urban Place Networks*

15h40 – 16h10 coffee break

16h10 – 17h00 **Elsa Arcaute** (Geography, UCL, UK)

*Urban hierarchies and city boundaries through percolation theory and fractals*