University of Tunis El Manar (Tunisia) **Bergische University Wuppertal (Germany)**

German –Tunisian Winter School for Master and PhD students in Applied Stochastics

organized by

Prof. Dr. Habib Ouerdiane and Prof. Dr. Barbara Rüdiger

Faculty of Sciences of Tunis - Department of Mathematics

Place: Bergische Universität Wuppertal

Lecture 1: Feynman-Kac formula for Schrödinger Operators and Quantum Field Theory
by **Achref Lemjid** (Tunis El-Manar University)

Lecture 2: Backward Stochastic differential equations
by ***Abidi Heni*** (Tunis El-Manar University)

Lecture 3: Probabilistic reconstruction of genealogies for polyploid plant species
by **Chiraz Trabelsi** (Angers University, France)

Lecture 4: Introduction to HJM and its applications in Finance
by **Dennis Schroers** (Bergische Universität Wuppertal)

Program

Week: 03.12 – 07.12

Thursday, December 6, 2018
10:30 – 11:30 ***Talk by Tristan Nikolaus*** *(F.13.11)*
On Donsker invariance principle

12:15 - 13:45 ***Scientific Discussions*** *(MI.13.05)*

Week: 10.12 – 14.12

Tuesday, December 11, 2018
16:00 - 17:30 ***Lecture 1*** *(F.13.11)*

Wednesday December 12, 2018
16:00 - 17:00 ***Lecture 2*** *(Seminar room K1)*

Thursday, December 13, 2018
10:30 – 11:30 ***Talk by David Kehl*** *(F.13.11)*
On metrical properties of Wasserstein distances

12:15 - 13:45 ***Elevator Speech of Master and PhD Students*** *(MI.13.05)*

Friday, December 14, 2018
14:30 - 16:00 ***Presentation by Ghaith Trabelsi*** (T.09.01)
From the formation to the executation of a film production

16:00 – 16:30 ***Christmas party*** (G.16.09)

16:30 - 18:00 ***Lecture 2*** *(G.16.09)*

Week: 17.12 – 21.12

Monday, December 17, 2018
16:15 – 17:45 ***Lecture 3*** *(G.16.09)*

18:00 - 19:30 ***Lecture 1*** *(G.16.09)*

Tuesday, December 18, 2018
16:15 - 17:45 ***Lecture 2*** *(F.13.11)*

18:00 - 18:45 ***Talk by Habib Ouerdiane*** *(G.15.34)*
Infinite dimensional operators and applications to the heat equation

Wednesday December 19, 2018
16:00 - 17:30 ***Lecture 1*** *(Seminar room K1)*

Thursday, December 20, 2018
10:30 – 11:30 ***Talk by Thomas Hantschmann*** *(F.13.11)*
Introduction to Copulas

12:15 – 13:45 ***Lecture 4*** *(MI.13.05)*