

# Section 5: Probability and Mathematical Statistics

**Friday, June 29<sup>th</sup>, 2007**

**09:00–10:45** Chairman: **Marius Iosifescu**

09:00–09:45 **Alexandra Bellow** From Riemann to Lebesgue by a.s averaging  
10:00–10:45 **Nicolae Dinculeanu** Summability criterion for the stochastic integral

**Coffee**

**11:15–12:00** Chairman: **Alexandra Bellow**

11:15–12:00 **Peter Jagers** The path to extinction

**Lunch**

**15:30–17:45** Chairman: **Gheorghe Mişcoi**

15:30–16:00 **Luiza Badin** Nonparametric efficiency analysis: recent developments  
16:00–16:30 **Costel Balcău** On maxentropic reconstruction method and applications

**Coffee**

16:45–17:15 **Diana Stanciu** On topological properties of the solution set for a class of variational inequalities  
17:15–17:45 **Nicoleta Breaz** Spline models in fitting and smoothing problems

# Saturday, June 30<sup>th</sup>, 2007

09:00–12:00 Chairman: **Peter Jagers**

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|-------------|-----------------------|---|
| 09:00–09:45 | <b>Pierre Liardet</b> | Dynamical processes behind number systems and related digital sequences |
| 10:00–10:45 | <b>Cor Kraaikamp</b>  | Metric properties of Denjoy's canonical continued fraction expansion    |

## Coffee

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|-------------|--------------------------|--|
| 11:15–12:00 | <b>Ulrich Herkenrath</b> | Random systems with complete connections, iterated function systems and autoregressive time series |
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## Lunch

15:30–16:15 Chairman: **Pierre Liardet**

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|-------------|------------------------|---|
| 15:30–16:15 | <b>Gheorghe Mişcoi</b> | Generalized models in queueing analysis |
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## Coffee

16:45–17:55 Chairman: **Vasile Preda**

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|-------------|-----------------------|---|
| 16:45–16:55 | <b>Olga Benderski</b> | Congestions in priority queueing systems  |
| 16:55–17:15 | <b>Olesia Groza</b>   | Performance characteristics of the queueing models in network technologies  |
| 17:20–17:35 | <b>Sant Mishra</b>    | Computational approach to cost analysis of renewal model in clocked queueing network  |
| 17:35–17:55 | <b>Daniel Ciuiu</b>   | Solving nonlinear systems of equations and nonlinear systems of differential equations by the Monte Carlo method using queueing networks and games theory |

# Monday, July 2<sup>nd</sup>, 2007

09:00–10:45 Chairman: **Cor Kraaikamp**

- 09:00–09:45 **Bogdan Iftimie** An iterative stochastic construction for a solution of some Navier-Stokes equations
- 10:00–10:45 **Cristian Preda** A new method of estimation the distribution of one and two-dimensional scan statistics

## Coffee

11:15–12:05 Chairman: **Bogdan Iftimie**

- 11:15–11:45 **Doru Constantin** The variants of the FastICA algorithm for noisy data by using kurtosis and negentropy
- 11:45–12:05 **Daniela Ijacu** Differential games with stochastic perturbation associated with non adapted solutions

## Lunch

15:30–16:30 Chairman: **George Haiman**

- 15:30–16:00 **Roxana Ciumara** On empirical Bayes estimators under some types of loss function
- 16:00–16:30 **Tiberiu Postelnicu** Connections between possibility theory and mathematical statistics

## Coffee

16:45–17:45 Chairman: **Cristian Preda**

- 16:45–16:55 **Alexandra Colojoară** On the Wold decomposition of some periodical stochastic processes
- 17:15–17:45 **Ana-Maria Staicu** Small sample inference for cohort and case control studies

**Tuesday, July 3<sup>rd</sup>, 2007**

**Special Session : Advanced Mathematical Methods for Finance**

Chairman: **Constantin Varsan**

- 09:00–09:45 **Lucia Caramellino** Large deviations estimates of the crossing probability for small time and applications to Monte Carlo Methods in finance
- 10:00–10:45 **Vlad Bally** Mallianvin calculus for locally smooth law and applications to jump type diffusions

**Coffee**

- 11:15–12:00 **Florin Rădulescu** Notes on free probability
- 12:15–13:00 **Mircea Nica** Option evaluation formulas for some classes of Levy processes

**Lunch**

- 15:30–16:00 **Marinela Marinescu** A unified approach to index theorems for holomorphic maps and foliations
- 16:00–16:30 **Pavel Farcaș** Istochastic models in risk evaluation for financial portofolio options

**Coffee**

- 17:00–17:30 **Oana Mocioalcă** Regularity of solutions of the heat equation driven by irregular Gaussian processes
- 17:40–18:00 **Nadia Bonchi s** Dependence of the optimal capital stock and consumption evolution on the consumers growth rate in the framework of Ramsey model on finite horizon