Guide to the

# Ninth International Workshop on Simulation

# IWS 2018

Barcelona, June 25-29 2018

http://ssa.cf.ac.uk/iws2018/index.htm

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INFORMS Simulation Society

Saint Petersburg State University

UNIVERSITAT DE BARCELONA


UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

Welcome to Barcelona, Benvinguts a Barcelona!

The Department of Statistics and Operation Research of the Polytechnic University of Catalonia in collaboration with the Statistics Department of the Barcelona University, the Department of Statistical Modelling of Saint Petersburg State University and INFORMS Simulation Society are sponsoring the 9th International Workshop on Simulation.

This international conference is devoted to statistical techniques in stochastic simulation, data collection and analysis of scientific experiments and studies representing broad areas of interest. The 1st- 6th Workshops took place in St. Petersburg (Russia) in 1994, 1996, 1998, 2001, 2005 and 2009, the seventh in June 2013 in Rimini, and the eight in September 2015 in Vienna.

The Ninth Workshop will take place in the UPC Campus of Polytechnic University of Catalonia in the cosmopolitan city of Barcelona in June 25-29, 2018

# Program committee

- Josep Casanovas (Spain), Chair
- Jordi Ocaña (Spain), Chair
- Viatcheslav Melas (Russia), Chair
- Pau Fonseca (Spain), Chair
- Esteve Codina (Spain)
- Mapaz Linares (Spain)
- Toni Monleón (Spain)
- Lídia Montero (Spain)
- Estevan Vegas (Spain)
- A. Andronov (Latvia)
- Anthony Atkinson (UK)
- N. Balakrishnan (Canada)
- Rosa Arboretti (Italy)
- Michel Broniatowski (France)
- Ekaterina Bulinskaya (Russia)
- Holger Dette (Germany)
- Sergei Ermakov (Russia)
- Valerii Fedorov (USA)
- Nancy Flournoy (USA)
- Subir Ghosh (USA)
- Marie Huskova (Czech)
- Nikolai Kolev (Brazil)
- Gennady Mikhailov (Russia)
- Simos Meintanis (Greece)
- Werner Mueller (Austria)
- Valery Nevzorov (Russia)
- Andrey Pepelyshev(UK)
- Fortunato Pesarin (Italy)
- Dieter Rasch (Austria)
- Luigi Salmaso (Italy)
- Rainer Schwabe(Germany)
- John Stufken (USA)
- Bruno Tuffin (France)
- Dariusz Ucinski (Poland)
- Henry Wynn (UK)

# Exhibitors


The Societat Catalana d'Estadística is the society that wants to collect the initiatives of the professionals of the Statistics in Catalonia and to promote everything that has allowed to improve the conditions of the statistical work, the debate and the analysis of the most current environment of the analysis of data. http://soce.iec.cat/

# Overview of Events

**Registration**

The registration desk is located at the Vertex Building.

- Sunday (June 24): 17-19h, at the entrance hall of the Auditori room, Vertex building, UPC Campus Nord
- Monday (June 25): 08:30-09:45h, at the entrance hall of the "Sala Actes", S1 floor, Vertex building, UPC Campus Nord

**Welcome Reception**

Sunday, June 24: 18:00-20:00 at the garden, Vertex building. UPC Campus Nord

**Opening Session**

Monday (June 25), 9:20-9:40h at the "Sala Actes", S1 floor, Vertex building, UPC Campus Nord

**Plenary talk**

A plenary talk is featured Monday and Tuesday in the 11:30-13:10h at the "Sala Actes", S1 floor, Vertex building, UPC Campus Nord

**Parallel Sessions**

More than 90 talks are given in two sessions rooms in VS217 i VS218. S2 floor, Vertex building, UPC Campus Nord.

**Thursday Excursion**

Mid-day excursion on Thursday, June 28. 4 hours visiting Barcelona city. At 15:30h from Vertex building.

**Conference Dinner**

Wednesday, June 27. 19:30 – 24:00h at the Bravo Restaurant located at Hotel Wella.

**Closing Ceremony**

Thursday, June 28: 13:35-13:55h at the "Sala Actes", S1 floor, Vertex building, UPC Campus North.

# General Information

**Conference Venue**: Vertex building. Universitat Politècnica de Catalunya. Campus North. Address: Plaça d'Eusebi Güell, 6, 08034 Barcelona

**How to get there:**

By metro: Line L3. Stop: Palau Reial

By bus. Number 54. Stop: Campus Nord

By tram: Stop: Palau Reial

**Registration**

The delegates registration fee includes:

- scientific material,
- coffee breaks, lunches,
- Welcome reception
- Thursday mid-day excursion.

**Badges** are required to Access the venue meeting. IWS 2018 badges must be worn at all sessions and events. Attendees without badges will be asked to go to the registration desk to register and pick up their badges. All attendees, including speakers and sessions chairs, must register and pay the registration fee.

**Conference Dinner Tickets**

The Wednesday evening conference dinner is open to attendees and guests who registered and paid in advance for tickets. The tickets are included in your registration envelope. There may be a limited number of tickets available on site at cost of 72euros. Go to the registration desk to inquire.

**Information desk**

The information desk is located in the hall of Auditori room or in the hall “Sala Actes”, Vertex building, UPC. Please contact the organizers and information desk, if you have any questions.

# General Information

### Internet Access

For using the Wi-Fi network in the Vertex building a guest accounts will be provided to you. You will receive the username and password with your registration.

### Coffee breaks, snacks and lunches

Coffee, tea, and beverages are served in the garden area during the 11:00-11:30 and 16:00-16:30 coffee breaks. Moreover, cash bar will be available at the same location from 08:00 to 18:00h. They will offer snacks and sandwiches at moderate prices.

### Getting around by public transport

The modern and extensive public transport system in Barcelona allows you to get anywhere within the city in the little time. Metro, buses and trams run frequently until late at night. We suggest you get tickets for the integrated transport system and fare zone. One zone should be enough if you stay in the city You can buy them at any metro station at the vending machines and at the pay booths. The vending machines have different language settings.

We recommend you get a T-10 pass that is valid for ten rides. It costs 10.20euros for one zone, is a lot cheaper than 10 single one-way tickets. The T-10 can be used by several persons at the same time on the metro, tram or bus. For each person you have to validate the ticket once. Once you validate the ticket, it is valid for until you reach your destination for a maximum of 75 mins.

One-way tickets can also be bought in the vending machines and from the driver in buses at the prices of 2,20euros each. With a single ticket you can get on and off as often as you want to until you have reached your destination. However, with a single ticket, you cannot change from one means of transport to another.

There are in addition unipersonal cards, valid for an unlimited number of trips in all transportation means for one (8.60euros), two (15euros), three (22euros), four (28.50euros) and five (35euros) days.

Visit www.tmb.cat for more information on public transport in Barcelona.

# Speaker information

### How to find your own session

All sessions will be held in the Vertex building, UPC. Rooms: VS217 and VS218 (S2 floor).

### Audio-visual services

All sessions rooms will be equipped with a computer, screen and a projector.

### Loading your presentation

We encourage speakers to bring a USB key with a copy of their presentation.

### Presentation guidelines

Time your presentation to fit within the designated time span, leaving enough time for audience questions and change of speaker. For sessions with 3 or 4 talks, please limit your presentation to 25 minutes.

### Presentation format

We strongly recommend that authors format their presentation in pdf. This reduces drastically potential difficulties due to the change in operating system. Alternatively, consider using Powerpoint for your presentation.

### Assistance during your session

If you have a problem in your session room related to technical needs or any other requests, please contact to registration desk.

### Session chair guidelines

The role of the Chair is to coordinate the smooth running of the session and introduce each speaker. The chair begins and ends each session on time. Please stick to the order of talks and times announced in the program.

### Program information desk

If you have general questions about the meeting or questions your own presentation, stop by at the information desk located in the hall of “Sala Actes”, S1 floor in Vertex building.

# Social Program

## **Welcome reception**: Sunday, June 24, 18:00-20:00h

Hall Auditori room and Garden, Vertex building, UPC.

**How to get there:**

By metro: Take line 3 to Palau Reial stop and then walk 10 minutes to Plaça Eusebi Güell or Dulcet street.

By bus: take number 54 to Campus Nord stop, then walk 2 minutes to Dulcet street.

By tram: take tram to Plau Reial stop and then walk 10 minutes to to Plaça Eusebi Güell or Dulcet street.

## **Mid-Day Excursion**: Thursday, June 28.

Departure: Two buses will depart at 15:30h from and return at 19:30h to Vertex building.

Barcelona city tour:

- Vertex Building, UPC.
- Plaça Espanya.
- Montjuïc (MNAC) stop. 15 minutes.
- Estadi Olímpic.
- Passeig de Colom.
- Mapfre.
- Arc de Triomf.
- Plaça Catalunya. stop. LOOP = Rambla, plaça Vila de Madrid, Pi, St Felip Neri, Sant Jaume, Plaça del Rei, Catedral, 4 gats, Catalunya. (1 hora.)
- Batlló.
- Pedrera.
- Diagonal. Vertex Building. UPC.

## **Conference dinner:** Wednesday, June 27, 19:30-00:00h

The conference dinner will take at the Bravo Restaurant located at Hotel Wella. Tickets are 72 Euros and can be purchased at the registration desk.

**How to get there.** By metro: Line 4 to Barceloneta stop and then walk 20 minutes to Hotel Wella. Re or by bus: Bus lines V15, 39 and 64 stop right in front of the hotel.

# Technical Program

An overview of the program is displayed in http://ssa.cf.ac.uk/iws2018/programme.htm.

The full program can also be downloaded from http://ssa.cf.ac.uk/iws2018/programme.htm

# Plenary Talks

## Discrete-Event Modeling and Simulation Methodologies: Past, Present and Future

**Session Monday 11:30 – 12:20h**
**Sala Actes room**


## Gabriel A. Wainer

Professor and Associate Chair, Graduate Studies
Systems and Computer Engineering
Carleton University
1125 Colonel By Drive. 3216 V-Sim
Ottawa, ON. K1S 5B6. CANADA


Modeling and Simulation methods have been used to better analyze the behavior of complex physical systems and it is now common to use simulation as a part of the scientific and technological discovery process. M&S advanced thanks to the improvements in computer technology, which, in many cases, resulted in the development of simulation software using ad-hoc techniques.

# Plenary Talks

## First Passage Time of Degradation Process

**Session Tuesday 11:30-12:20h**
**Sala Actes room**


## Narayanaswarny Balakrishnan

Distinguished University Professor
Department of Mathematics and Statistics
McMaster University
Hamilton
Ontario, Canada L8S 4K1


In this talk, I will begin by introducing some popular degradation processes, such as Wiener process and gamma process. After presenting their basic properties, I will discuss the derivation of first passage time distribution and its approximation. I will finally present some numerical results to illustrate the methods developed.

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Escola Tècnica Superior d'Enginyers
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Sala d'Actes

IWS 2018

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Pl. d'Eusebi
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Nexus I

Biblioteca

Poliesportiu

Omega

54, 75, H4

Caserna
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C. de Jordi Girona

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C. de l'Alfambra

C. de Trias i Giró

C. de Joan Obiols

Palau Reial

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Av. Diagonal

C. John Keynnes

Palau Reial

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Walking paths

Av. de Pedralbes

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# NOTES

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# THURSDAY, June 28

*Registration 8:30-9:45*

| | Room VS217 | Room VS218 |
|---|---|---|
| **9:20-11:00** | **Other talks on statistical tests**<br>**Session organizer & Chair: L. Salmaso** | |
| | Arboretti R., Ceccato R., Corain L., Ronchi F., L. Salmaso. Multivariate small sample tests for two-way designs with applications to industrial statistics | |
| | L. Corain, L. Salmaso. Nonparametric Permutation-based Testing on Multivariate Paired Preference Sensorial Evaluations | |
| | P. Flores, J. Ocana, T. Sanchez. Pretesting Assumptions for the validity of two sample Mean Tests | |
| | V. Svendova, S.A. Herzog, M.G. Schimek. Comparing non-parametric bootstrap and subsampling batch means methods for confidence assessment of ranked list latent variable estimates | |
| **11:00-11:30** | **coffee break** | |
| **11:30-13:10** | **Queueing Models and applications**<br>**Session organizer: V. Rykov, Chair: A. Zeifman** | **Parametric estimates and solving the problems with random parameters by the Monte Carlo method**<br>**Session organizer & Chair: O. Soboleva** |
| | V. Rykov. On steady state probabilities of renewable systems with Marshal-Olkin failure model | Soboleva O.N., Epov M.I., Kurochkina E.P. Effective coefficients in the electromagnetic logging problem with log-normal distribution, multi-scale conductivity and permittivity |
| | Ya. Satin, E. Morozov, R. Nekrasova, A. Zeifman, K. Kiseleva, A. Sinitcina, A. Sipin, G. Shilova, I. Gudkova. Bounds on the Rate of Convergence for Constant Retrial Rate Queueing Model with Two Servers | Mikhailov G.A., Lotova G.Z. New algorithms of Monte Carlo method for investigation of criticality of particle scattering process with multiplication in random media |
| | D. Rosadi, H. Wahyuni, S. Redjeki. Modeling the fair market price of Sukuk Mudharabah using monte carlo simulation approach | A. Pepelyshev. Estimation in continuous time regression models |
| | Chien-Yu Peng, Kun-Hung Lin. Optimal Doubling Burn-in Policy Based on Tweedie Processes with Applications to Degradation Data | |
| **13:15-13:35** | **Closing session, Room SALA D'ACTES** | |
| **13:35-15:15** | **LUNCH** | |
| **15:30-19:30** | **Excursion Mid-Day - Barcelona Tour** | |

# WEDNESDAY, June 27

*Registration 8:30-9:45, June 27*

| | Room VS217 | Room VS218 |
|---|---|---|
| **9:20-11:00** | **Recent advances in the computation of optimal experimental designs**<br>**Session organizer & Chair: Radoslav Harman** | **Algorithms and estimators of stochastic simulation**<br>**Session organizer & Chair: A.V. Voytishek** |
| | L. Pronzato. Design of Experiments, Bayesian Quadrature and Sensitivity Analysis | Shipilov N.M., A.V. Voytishek. On conditional optimization of the randimized projection and projection-mesh functional algorithms for numerical solution of the fredholm integral equations of the second kind |
| | S.D. Ahipasaoglu, B. Tan. A New Branch and Bound Algorithm for the D-optimal Design Problem | Abdrazakova A.R., Voytishek A.V. Computable simulated transformations of the cartesian coordinates for random vectors |
| | N. Gaffke. A Quasi-Newton Algorithm for Optimal Approximate Linear Regression Design | Lukinov V. Simulation of the interaction of solitons by the Monte Carlo method |
| | L. Filova, R. Harman. Ascent with Quadratic Assistance for the Construction of Exact Experimental Designs | Lotova G.Z. Supercomputer simulation of electron avalanches in gases with calculation of diffusive characteristics |
| **11:00-11:30** | **coffee break** | |
| **11:30-12:20** | **Room SALA D'ACTES : Meeting of the LOC and SPC** | |
| **12:20-12:45** | A. Steland. Inference and change detection for high-dimensional time series | |
| **12:45-13:10** | I.Yu. Malova, A. Berred, S.V. Malov. On the interval right censored data with unobserved status after censoring | |
| **13:10-14:20** | **LUNCH** | |
| | **Room VS217** | **Room VS218** |
| **14:20-16:00** | **Methods for Structural Analysis of Complex Data**<br>**Session organizer & Chair: Ansgar Steland** | **Numerical simulation of random fields and processes with applications**<br>**Session organizers & Chair: V.A. Ogorodnikov** |
| | H. Manner. Testing for Structural Breaks in Factor Copula Models | Ogorodnikov V.A., Khlebnikova E.I., Sereseva O.V. Numerical stochastic model of time series of air heat content indicators with considering for diurnal and seasonal nonstationarity |
| | N. Lee, Jong-Min Kim. Block tensor train decomposition for missing data estimation | Ogorodnikov V.A., Khlebnikova E.I., Kargapolova N.A. Monte Carlo simulation of air temperature, pressure and relative humidity joint non-stationary time-series |
| | A. Piryatinska, Darkhovsky B. Model-free classification of panel data via the ε-complexity theory | Ogorodnikov V.A., Medvyatskaya A.M. Approximate spectral model of periodically correlated air temperature time-series |
| | Darkhovsky B., Piryatinska A. The ε-complexity of finite dimensional continuous maps | Prigarin S.M., Zakovryashin A.V. Fast computation and visualization software for water-drop cloud phase functions |
| **16:00-16:30** | **coffee break** | |
| **16:30-18:10** | **Chair: B. Darkhovsky** | **Algebra and Combinatorics for statistical modeling**<br>**Session organizer & Chair: Fabio Rapallo** |
| | E. Yashchin. Gradient Analysis of Markov-type Control Schemes and its Applications | R. Fontana, F. Rapallo. Aberrations of Orthogonal Arrays with removed runs |
| | N. Mause. Inference on the Second Moment Structure of High-Dimensional Sensor-Type Data in a K-Sample Setting | P. Semeraro, E. Di Nardo. Symbolic method of cumulants for subordinated Brownian motions: the variance gamma case |
| | M. Bours. Asymptotics for High-Dimensional Covariance Matrices of Factor Models | G. Varando, E. Riccomagno. Algebraic views on classification problems |
| | J. Noonan, A. Zhigljavsky. Approximations of the boundary crossing probabilities for the maximum of moving weighted sums | |
| **19-30-00:00** | **Conference Dinner, the Bravo Restaurant** | |

# TUESDAY, June 26

*Registration 8:30-9:45, June 26*

| | Room VS217 | Room VS218 |
|---|---|---|
| 9:20-11:00 | **Perspectives in Optimal Design of Experiments**<br>**Session organizer: Rainer Schwabe, Chair: Heinz Holling** | **Goodness-of-Fit and Related Problems**<br>**Session organizer & Chair: Simos Meintanis** |
| | F. Röttger, T. Kahle, R. Schwabe. Geometry of Parameter Regions for Optimal Designs | J. Allison, S.G. Meintanis, J. Ngatchou-Wandji. Testing for serial independence in vector autoregressive models |
| | E. Masoudi, H. Holling, W.K. Wong. Finding Optimal Designs for Nonlinear Models Using the Imperialist Competitive Algorithm | A. Fernandez, A. Cabana, H. Joe, D. Morina, P.Puig. Modelling count time series in a state-dependent under-reporting scheme |
| | M. Radloff, R. Schwabe. Locally D-optimal Designs for Non-linear Models on the k-dimensional Ball | B. Ebner. Goodness of Fit Testing via fixed points of distributional transforms |
| | R. Schwabe, F. Freise, O.I.O. Idais, E. Nyarko, M. Radloff, D. Schmidt. The Revival of Reduction Principles in the Generation of Optimal Designs for Non-standard Situations | P.-O. Goffard. Goodness-of-fit tests for compound distributions with applications in insurance |
| 11:00-11:30 | **coffee break** | |
| 11:30-12:20 | **Room SALA D'ACTES : PLENARY TALK : Narayanaswarny Balakrishnan** | |
| 12:20-12:45 | K. Samouylov. Queueing Models for Performance Analysis of Future Wireless Networks | |
| 12:45-13:10 | M. Prus. Optimal Designs for Minimax Criteria in Random Coefficients Regression Models | |
| 13:10-14:20 | **LUNCH** | |
| | **Room VS217** | **Room VS218** |
| 14:20-16:00 | **Experimental Design in Models with Random Parameters**<br>**Session organizer & Chair: Maryna Prus** | **Goodness-of-Fit and Related Problems**<br>**Session organizer & Chair: Simos Meintanis** |
| | H. Holling, F. Freise, R. Schwabe. Optimal design for growth curve models | S. Meintanis. Goodness-of-Fit Tests with Survival Data |
| | R. Harman, M. Prus. Computing optimal experimental designs with respect to a compound Bayes risk criterion | C. Pretorius, JWH Swanepoel. Bootstrap confidence bounds: splitting the sample for higher-order accuracy |
| | M. Schmidt, R. Schwabe. Optimal Designs for Count Data with Random Parameters | L. Santana, JWH Swanepoel. A nonparametric point estimation technique using the m-out-of-n bootstrap |
| | | G. Geenens, P. Lafaye de Micheaux, S. Penev. The Hellinger dependence measure and its root-n estimation |
| | **Advances in Experimental Designs**<br>**Session organizer: Nancy Flournoy** | |
| | Xiaojian Xu . Robust Sequential Designs for Approximate Inference in Generalized Linear Mixed Models | |
| 16:00-16:30 | **coffee break** | |
| 16:30-18:10 | **Issues In Inference with Adaptive Designs**<br>**Session organizer: Nancy Flournoy** | **Asymptotic Analysis of Complex Systems**<br>**Session organizers: Ekaterina Bulinskaya and Elena Yarovaya** |
| | Yanqing Yi. The Markov decision process for adaptive design of clinical trials | Ya. Belopolskaya. A stochastic model for the MHD-Burgers system |
| | S. Tarima. Blinded and Unblinded Sample-size Recalculation under Parametric Models | V. Naoumov, Yu. Gaidamaka, K. Samouylov. Analysis of Multicast Queuing Systems with Random Requirements of Overlapping Resources |
| | A. Lane. Adaptive Designs for Optimum Observed Fisher Information | E Yarovaya, E. Ermishkina. Simulation of Branching Random Walks on Multidimensional Lattices |
| | Zaher Kmail, K. Eskridge. Optimal Design for a Causal Structure | A. Gross. A Nonhomogeneous Risk Model |
| 18:10-18:30 | | E. Bulinskaya, B. Shigida. The probability of the capital staying above zero long enough in the Cramer-Lundberg model |

## SUNDAY, June 24

*Registration 17:00-19:00, HALL Auditori room*

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|---|---|
| 9:20-09:40 | **Welcome party. Garden space** |

## MONDAY, June 25

*Registration 8:30-9:45, June 25*

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|---|---|---|
| 9:20-09:40 | **Opening greetings, Room SALA D'ACTES** | |
| 9:45-11:00 | **Room VS217** | **Room VS218** |
| | **Information-based Subdata Selection for Big Data**<br>**Session organizer & Chair: Min Yang** | **Monte Carlo methods for nonlinear and vector kinetic equations**<br>**Session organizers: S.V. Rogasinsky** |
| | Min Yang. Information-Based Optimal Subdata Selection for LASSO Regression | I.N. Medvedev . Universal modification of vector weighted method of correlated sampling with finite computation cost |
| | Haiying Wang. Statistical Inference for Big Data through Subdata | Tracheva N.V., Ukhinov S.A. On the evaluation of spatial-angular distributions of polarization characteristics of scattered radiation |
| | W. Zheng. Optimal design of sampling survey for efficient parameter estimation | S.V. Rogasinsky. Statistical modelling algorithm for solving the nonlinear Boltzmann equation based on the projection method |
| 11:00-11:30 | **coffee break** | |
| 11:30-12:20 | **Room SALA D'ACTES : PLENARY TALK : Gabriel Wainer** | |
| 12:20-12:45 | C. Ruiz-Martin, G. Wainer, A. Lopez-Paredes. Studying the resilience of communications in organizations using formal modelling and simulation | |
| 12:45-13:10 | L. Montero, M.P. Linares, J. Salmeron, G. Recio, E. Lorente, J.J. Vázquez. Analytics on Mobility Data from new technologies: a Simulation-based Assessment | |
| 13:10-14:20 | **LUNCH** | |
| 14:20-16:00 | **Room VS217** | **Room VS218** |
| | **Computer and Physical experiment: Design, Model and Analysis**<br>**Session organizer & Chair: Grazia Vicario** | **Monte Carlo methods in the atmosphere optics**<br>**Session organizer & Chair: Ukhinov S.A.** |
| | F. Centofanti, A. Lepore, A. Menafoglio, B. Palumbo, S. Vantini. Run-length performance estimation of the functional regression control chart | Kargin B.A., Kargin A.B., Prigarin S.M., Ukhinova O.S. Statistical Modelling of the Optical Radiation Transfer in Ocean-Atmosphere System |
| | R. Borgoni, C. Galimberti, D. Zappa. Identifying and representing clusters of spatial defects in microelectronics planar artefacts | Kargin B.A., Kablukova E.G., Zheng P. Monte Carlo Simulation of Optical Radiation Transfer Process in Stochastic Scattering Media |
| | G. Vicario, G. Pistone. Simulated Variogram-based Error Inspection of Manufactured Parts | Korda A.S., Ukhinov S.A. Numerical statistical study of reconstruction algorithms of the aerosol scattering matrix elements |
| | Yu.G. Dmitriev, G.M. Koshkin. Combined nonparametric estimators of probability characteristics | V.A. Ogorodnikov, S.M. Prigarin, E.G. Kablukova. Stochastic models of atmospheric clouds |
| 16:00-16:30 | **coffee break** | |
| 16:30-18:10 | **Inference following Adaptive Designs**<br>**Session organizer: N. Flournoy, Chair: J.F. Lopez Fidalgo** | **Randomized Quasi Monte Carlo Methods: Numerical Experiments**<br>**Session organizer: S.M. Ermakov, Chair: Yu. Kashtanov** |
| | N. Flournoy, C. May, C. Tomassi. Inference under a two-stage adaptive design for non-linear regression models with normal errors | Ermakov S.M., Leora S.N. Some properties of quasirandom numbers and their randomization |
| | N. Flournoy, A. Oron. Statistical Implications of Informative Dose Allocation in Binary Regression | Ermakov S.M., Semenchikov D.N. On quasirandom search |
| | N. Flournoy, J. Moler, F. Plo. Performance Measures for Dose-Finding Experiments | Ermakov S.M., Pogosian A. On Numerical Calculations of Stochastic Integrals |
| | J. F. López Fidalgo, Guillermo Julia. Bayesian optimal designs for the Michaelis-Menten Model | Yu. Kashtanov. Stochastic Mesh Method for Non-Linear Functionals on Paths |
| 18:10-18:30 | R. A. Guchenko, V. B. Melas. T-Optimal Designs for Discrimination between Rational and Polynomial Models | T.M. Tovstik, P.E. Tovstik, D.A. Shirinkina. Linear generalized Kalman-Bucy filter |