

**International Conference on Probability  
Theory and Mathematical Statistics**

**Dedicated to 100th Anniversary of  
Professor Gvanji Mania**



**Program**

**July 16–18, 2018**

**Tbilisi, Georgia**

## **General information**

### **Location and dates**

International Conference on Probability Theory and Mathematical Statistics (Tbilisi, Georgia, July 16–18, 2018) is dedicated to a centenary of Professor Gvanji Mania’s birth. The conference is organised by the Ivane Javakhishvili Tbilisi State University, Ilia Vekua Institute of Applied Mathematics, Andrea Razmadze Mathematical Institute, Georgian Technical University, Muskhelishvili Institute of Computational Mathematics, and Georgian Statistical Association.

## **Advisory board and organising committee**

### **Advisory board**

Estate Khmaladze (Victoria University of Wellington),  
Elizbar Nadarya (Ivane Javakhishvili Tbilisi State University),  
George Sharvashidze (Ivane Javakhishvili Tbilisi State University).

### **Organising committee**

B. Chikvinidze (Georgian Statistical Association), A. Danelia (Tbilisi City Hall), S. Gugushvili (Leiden University), V. Kvaratskhelia (Chairman, Georgian Technical University, Niko Muskhelishvili Institute of Computational Mathematics), B. Mamporia (Niko Muskhelishvili Institute of Computational Mathematics), G. Mirzashvili (Association of Actuaries and Financial Analysts), R.M. Mnatsakanov (Vice-chairman, West Virginia University), M. Nadareishvili (Ilia State University), O. Purtukhia (Chairman, Tbilisi State University, A. Razmadze Mathematical Institute), M. Shashiashvili (Vice-chairman, Tbilisi State University), R. Tevzadze (Vladimir Chavcha-

midze Institute of Cybernetics), T. Toronjadze (Georgian American University).

## Venue and directions

Lectures will be held in Ivane Javakhishvili Lecture Room (room 107) at I. Javakhishvili Tbilisi State University, Building 1, 1 Ilia Chavchavadze Ave.

## Webpage

For the latest information on the workshop see  
<http://mania-100-tbilisi-2018.tsu.ge/leng/1/2>.

## Sponsors

The workshop is financially supported by:

- Ivane Javakhishvili Tbilisi State University;
- Ilia Vekua Institute of Applied Mathematics;
- Andrea Razmadze Mathematical Institute;
- Georgian Technical University;
- Muskhelishvili Institute of Computational Mathematics;
- Georgian Statistical Association.

## Practicalities

### Lunches

Lunches will be served at Restaurant No. 1 (1 Petriashvili Str.). The restaurant is at a walking distance from the conference site.

## **Welcome reception**

The welcome reception will be held on Monday, July 16, starting at 18:00.

## **Sightseeing tour**

A sightseeing tour will take place on Tuesday, July 17, starting at 15:00.

## **Conference dinner**

The conference dinner will be served at the restaurant Megruli Sakhli, 13 Ilo Mosashvili St., on Tuesday, July 17, at 19:30.

## **Closing and reception**

Reception will be held after the closing of the conference, on Wednesday, July 18, at 18:00.

## **Catering and transportation in Tbilisi**

One can consult online sources, such as <http://wikitravel.org/en/Tbilisi>, for information on catering and public transportation in Tbilisi.

## **Questions**

Local organisers will be happy to help you with questions of practical nature.

# Schedule

## Monday, July 16 (Room 107)

<b>10:00 -</b>	<b>Registration</b>
<b>Chair of session</b>	Malkhaz Shashiashvili
<b>10:30 - 10:45</b>	<b>Opening</b>
<b>10:45 - 11:15</b>	Omar Purtukhia, <i>Professor Gvanji Mania - 100</i>
<b>11:15 - 11:45</b>	Estate Khmaladze, <i>Unitary operators and empirical processes</i>
<b>12:00 - 12:20</b>	<b>Break (Room 101)</b>
<b>Chair of session</b>	Estate Khmaladze
<b>12:20 - 12:50</b>	Igor Pruenster, <i>Discrete structures and prediction in Bayesian Nonparametrics</i>
<b>12:50 - 13:20</b>	Sergey Smirnov, <i>Feller transition kernel with supports of measures defined by a multivalued function</i>
<b>13:20 - 14:40</b>	<b>Lunch</b>
<b>Chair of session</b>	Igor Pruenster
<b>14:40 - 15:10</b>	Rimas Norvaiša, <i>Convergence in law of partial sums of linear processes in p-variation norm</i>
<b>15:10 - 15:40</b>	Jevgenijs Ivanovs, <i>Zooming-in on a Lévy process at its supremum</i>
<b>16:00 - 18:00</b>	<b>Festal session</b>
<b>18:00 -</b>	<b>Reception (Room 101)</b>

**Tuesday, July 17**

<b>Chair of session</b>	Rimas Norvaiša
<b>10:00 - 10:30</b>	Petre Babilua, <i>On some goodness-of-fit tests based on Wolverton-Wagner type estimates of distribution density</i>
<b>10:30 - 11:00</b>	Denis Belomestny, <i>Poisson deconvolution via Laplace transform</i>
<b>11:00 - 11:30</b>	Robert Mnatsakanov, <i>Nonparametric density estimation via the scaled Laplace transform inversion</i>
<b>11:30 - 11:50</b>	<b>Break (Room 101)</b>
<b>Chair of session</b>	Robert Mnatsakanov
<b>11:50 - 12:20</b>	Karen Gasparyan, <i>The optional strong martingales and supermartingales and their applications</i>
<b>12:20 - 12:50</b>	Marina Santacroce, <i>Forward backward semi-martingale systems for utility maximization</i>
<b>12:50 - 13:20</b>	Besik Chikvinidze, <i>An extension of the mixed Novikov-Kazamaki condition</i>
<b>13:20 - 14:40</b>	<b>Lunch</b>
<b>14:40 - 15:00</b>	<b>Visit to Muskhelishvili Institute of Computational Mathematics</b>
<b>15:00 - 18:00</b>	<b>Sightseeing tour</b>
<b>19:30 -</b>	<b>Conference dinner</b>

## Wednesday, July 18

- Chair of session** Vaja Tarieladze
- 10:30 - 11:00** Lasha Ephremidze, *Granger causality and matrix spectral factorization with application in neuroscience*
- 11:00 - 11:30** Malkhaz Shashiashvili, *On the integral relationship between the early exercise boundary and the value function of the American put option*
- 11:30 - 12:00** Revaz Kakubava, *An alternative transient analysis for semi-Markov queuing systems*
- 12:00 - 12:20** **Break (Room 101)**
- Chair of session** Denis Belomestny
- 12:20 - 12:50** Badri Mamporia, *On functionals of the Wiener process in a Banach space*
- 12:50 - 13:20** Nanuli Lazrieva, *Recursive estimation of one-dimensional parameter of compound Poisson process*
- 13:20 - 14:40** **Lunch**
- Chair of session** Karen Gasparyan
- 14:40 - 15:10** Vaja Tarieladze, *On two inequalities of Nikishin*
- 15:10 - 15:40** Mark Podolskij, *Estimation of the linear fractional stable motion*
- 15:50 -** **Reception (Room 101)**