



May 21-25, 2018
Euler International Mathematical Institute, St. Petersburg

School-Conference “Modular Forms and Beyond”

Scientific organisers: **Valery Gritsenko** (University of Lille/IUF/NRU HSE)
Nils-Peter Skoruppa (University of Siegen)

<http://www.pdmi.ras.ru/EIMI/2018/Sagaf/index.html>

The research school-conference is organised by Laboratory of Mirror Symmetry and Automorphic Forms of NRU HSE and EIMI and supported by the Simons Foundation (via PDMI RAS).

Monday, 21 May 9:00—9:30 Registration in EIMI

9:30—10:30 **Zudilin 1**

10:30—11:00 coffee-break

11:00—12:00 **Gritsenko 1**

12:00—13:00 **Gritsenko 2**

13:00—15:00 lunch

15:00—16:00 **Weissauer 1**

The Moscow seminar on automorphic forms

16:15—17:05 **V. Golyshev** (IITP RAS) Fibered motives and L-values

17:20—17:40 **N. Sakharova** (NRU HSE) Modular Cauchy kernel
corresponding to the Hecke curve

17:40—18:00 **K. Stuken** (NRU HSE) Free algebras of the Hilbert modular
forms

18:00—18:20 **D. Adler** (NRU HSE) The ring of weak Jacobi forms for
 D_n root lattice

18:30—19:00 **H. Wang** (CEMPI, Lille) Weyl invariant E_8 Jacobi forms

19:00—21.00 **Party**

Tuesday, 22 May

9:00— 9:20 **A. Wernz** (RWTH) The isomorphism between the
Hermitian modular group and $O(2,4)$

9:30—10:30 **Weissauer 2**

10:30—11:00 coffee-break

11:00—12:00 **Skoruppa 1**

12:00—13:00 **Skoruppa 2**

13:00—15:00 lunch

15:00—16:00 **Zudilin 2**

**54 session of the French-German automorphic seminar
Aachen-Bonn-Köln-Lille-Siegen**

- 16:15—16:45 **H. Wang** (Lille) Non-existence of 2-reflective modular forms
16:45—17:15 **M. Woitalla** (RWTH) Coordinates for the graded ring of modular forms on the Cayley half-space of degree two
17:30—18:00 **A. Kalmynin** (NRU HSE) Cohen-Kuznetsov series and intervals between numbers that are sums of two squares
18:00—18:30 **P. Kiefer** (TU-Darmstadt) Boundary Components of the Orthogonal Upper Half-Plane
18:30—19:45 coffee-tea-pies
20:00—22:30 **Excursion along the rivers**

Wednesday, 23 May

- 9:00—9:20 **D. Frolenkov** (NRU HSE/MIAN) Convolution formula for the sums of generalized Dirichlet L-series
9:30—10:30 **Osipov 1**
10:30—11:00 coffee-break
11:00—12:00 **Skoruppa 3**
12:00—13:00 **Weissauer 3**

Thursday, 24 May

- 9:00—9:20 **Y. Li** (Tongji U., Shanghai) Jacobi Forms of Squarefree Level and Eichler Orders in Definite Quaternion Algebra
9:30—10:30 **Skoruppa 4**
10:30—11:00 coffee-break
11:00—12:00 **Zudilin 3**
12:00—13:00 **Osipov 2**
13:00—15:00 lunch
15:00—15:30 **St. Bleß** (RWTH) The Maass-Space and ultraspherical differential operators
15:30—15:45 **F. Schaps** (RWTH) Eisenstein series for the orthogonal group $O(2,n)$
15:45—16:30 **A. Ustinov** (Pacific National University) An elementary approach to Somos-4 sequences
16:30—17:00 coffee-break

Colloquium of the Chebyshev Laboratory of SPbSU

- 17:00—17:50 **Rainer Weissauer**, Automorphic forms, L-functions and the Langlands conjectures
18:00—19:00 coffee-tea-vine-pies
19:00—19:15 **A. Mocanu** (Nottingham U.) Level raising operators for Jacobi forms of lattice index

- 19:15—19:30 **Xiong Ran** (Tongji U.) Fourier coefficients of Jacobi Eisenstein series of lattice index
- 19:30—20:00 **G. Voskresenskaya** (Samara University) Eta-function in modern investigations

Friday, 25 May

- 9:00— 9:20 **A. Hauffe-Waschbüsch** (RWTH) Growth of Fourier coefficients of Hermitian modular forms
- 9:30—10:30 **Osipov 3**
- 10:30—11:00 coffee-break
- 11:00—12:00 **Zudilin 4**
- 12:00—13:00 **Weissauer 4**
- 13:00 lunch
- 15:00—18:00 Research seminar, consultations and discussions

The list of mini-courses

Valery Gritsenko (University of Lille/IUF/HRU HSE) *“Siegel paramodular forms of genus 2 and their L-functions”*

Denis Osipov (MIAN/ NRU HSE/ NUST MISIS) *“Parshin-Beilinson adeles on algebraic varieties”*

Nils-Peter Skoruppa (University of Siegen) *“Explicit theory of modular forms and Jacobi forms”*

Rainer Weissauer (University of Heidelberg) *“L-series and Bessel models for $GSp(4)$ ”*

Wadim Zudilin (the Radboud University) *“Arithmetic differential equations”*