

The third Russian-Chinese conference on complex analysis, algebra, algebraic geometry and mathematical physics

Conference Program

Wednesday, May 11

10⁰⁰–10³⁰ *Registration*

10³⁰–10⁴⁰ *Opening*

Morning session

Chairman: Armen Sergeev

10⁴⁰–11³⁰ Xiangyu Zhou (Institute of Mathematics of CAS)

Recent progress on multiplier ideal sheaves and optimal L^2 extensions

11³⁰–12⁰⁰ Coffee break

12⁰⁰–12⁵⁰ Dmitry Treschev (Steklov Mathematical Institute of RAS)

On the inclusion of a diffeomorphism into a flow

13⁰⁰–13⁴⁰ Alexey Davydov (Lomonosov Moscow State University, Vladimir State University)

Theory of normal forms of linear second order mixed type PDEs on the plane

14⁰⁰–15⁰⁰ Lunch

Afternoon session

Chairman: Xiangyu Zhou

15⁰⁰–15⁴⁰ Chung Chun Yang (Nanjing University)

Value distribution theory and its applications to functional equations

15⁵⁰–16³⁰ Sergey Gorchinskiy (Steklov Mathematical Institute of RAS)

Categorical measures for varieties with finite group actions

16³⁰–17⁰⁰ Coffee break

17⁰⁰–17⁴⁰ Xiaoping Xu (Institute of Mathematics of CAS)

Generalizations of the classical theorem on harmonic polynomials

17⁵⁰–18²⁰ Anton Trushechkin (Steklov Mathematical Institute of RAS)

Perturbative treatment of inter-site couplings in the local description of open quantum networks

18³⁰ : *Welcome Party*

Thursday, May 12

Morning session

Chairman: Vladimir Popov

10⁰⁰–10⁵⁰ Yuefei Wang (Institute of Mathematics of CAS)

Dynamics of Newton maps and complexity

10⁵⁰–11²⁰ Coffee break

11²⁰–12¹⁰ August Tsikh (Siberian Federal University)

New versions of the Cauchy-Kovalevskaya theorem and the Weierstrass preparation theorem

12²⁰–13⁰⁰ Xiaotao Sun (Institute of Mathematics of CAS)

Étale fundamental group and D-modules in characteristic $p > 0$

13¹⁰–13⁴⁰ Alexey Shchuplev (Siberian Federal University)

McMullen's formula and a multidimensional analog of the Weierstrass ζ -function

14⁰⁰–15⁰⁰ Lunch

Afternoon session

Chairman: Chung Chun Yang

15⁰⁰–15⁴⁰ Tuen Wai Ng (University of Hong Kong)

Fermat functional equations revisited

15⁵⁰–16³⁰ Mikhail Katanaev (Steklov Mathematical Institute of RAS)

On homogeneous and isotropic universe

16³⁰–17⁰⁰ Coffee break

17⁰⁰–17⁴⁰ Sergei Kozyrev (Steklov Mathematical Institute of RAS)

Dark states in quantum photosynthesis

17⁴⁰ : *Visit to Laboratory of Popularization and Promotion of Mathematics
in Steklov Mathematical Institute*

Friday, May 13

12⁰⁰–16⁰⁰ *Excursion to the Kremlin*

The bus will leave from the Steklov Mathematical Institute at 12⁰⁰.

16⁰⁰–19⁰⁰ *Conference Dinner on board of the ship*

ATTENTION: You should check in the conference dinner during the Wednesday.

The ship will leave from the pier “Ustyinskiy most” at 16⁰⁰ and will arrive at the pier
“Naberezhnaya Tarasa Shevchenko” at 19⁰⁰.

Saturday, May 14

Morning session

Chairman: Yuefei Wang

10⁰⁰–10⁵⁰ Nanhua Xi (Institute of Mathematics of CAS)

Some infinite dimensional representations of reductive groups with Frobenius maps

10⁵⁰–11²⁰ Coffee break

11²⁰–12⁰⁰ Viktor Kulikov (Steklov Mathematical Institute of RAS)

On some actions of the symmetric group \mathbb{S}_4 on K3 surfaces

12¹⁰–12⁵⁰ Vladimir Popov (Steklov Mathematical Institute of RAS)

On the equations defining affine algebraic groups

13⁰⁰–13³⁰ Alexander Znamenskiy (Siberian Federal University)

A refinement of the Kovalevskaya theorem on analytic solvability of a Cauchy problem

14⁰⁰–15⁰⁰ Lunch

Afternoon session

Chairman: August Tsikh

15⁰⁰–15⁴⁰ Jinsong Liu (Institute of Mathematics of CAS)

Deformation of circle patterns and its applications

15⁵⁰–16³⁰ Viktor Zharinov (Steklov Mathematical Institute of RAS)

On the Backlund transformation

16³⁰–17⁰⁰ Coffee break

17⁰⁰–17⁴⁰ Anatol Odziejewicz (University of Bialystok)

Groupoids, algebroids and Poisson structures related to W^ -algebras*

Sunday, May 15

Morning session

Chairman: Nanhua Xi

10⁰⁰–10⁵⁰ Igor Volovich (Steklov Mathematical Institute of RAS)

Anti-de Sitter/conformal field theory correspondence, black holes and quantum biology

10⁵⁰–11²⁰ Coffee break

11²⁰–12⁰⁰ Siye Wu (National Tsing Hua University)

Quantisation of Hitchin's moduli space

12¹⁰–12⁵⁰ Sergey Suetin (Steklov Mathematical Institute of RAS)

The Problem of Analytic Continuation and Zero Distribution of Hermite–Padé Polynomials

13⁰⁰–14⁰⁰ Lunch

Afternoon session

Chairman: Igor Volovich

14⁰⁰–14⁴⁰ Xiao Zhang (Institute of Mathematics of CAS)

Noncommutative Differential Geometry via Deformation Quantization and Applications in Gravity

14⁵⁰–15³⁰ Anna Chugainova (Steklov Mathematical Institute of RAS)

Stability of stationary solutions of the generalized KdV-Burgers equation

15³⁰–16⁰⁰ Coffee break

16⁰⁰–16⁴⁰ Denis Osipov (Steklov Mathematical Institute of RAS, National University of Science and Technology “MISIS”)

Distribution spaces of two-dimensional local fields and representations of the discrete Heisenberg group

16⁵⁰–17²⁰ Nikolay Il'in (Steklov Mathematical Institute of RAS)

On extrema of the objective functional for the problem of ultra-fast generation of single qubit quantum gates