#### Conference

## on Complex Analysis and Mathematical Physics, dedicated to the 70th birthday of A. G. Sergeev

The conference is held with the financial support of the Russian Foundation for Basic Research, project No. 19-01-20023.

### Conference Program

All sessions of the conference will be held at the Steklov Mathematical Institute (8, Gubkina) on the 9th floor at the Conference Hall.

## Monday, March 18

 $10^{20}$ – $10^{50}$  Registration (9th floor)

 $10^{50} - 11^{00} \ Opening$ 

Morning session

Chairman: Dmitrii Treschev

11<sup>00</sup>–11<sup>40</sup> Pavel Exner (Doppler Institute for Mathematical Physics and Applied Mathematics, Prague)

Optimization of the principal eigenvalue in various geometries

 $11^{40}$ – $12^{00}$  Coffee break

12<sup>00</sup>–12<sup>40</sup> Peter Heinzner (Ruhr University Bochum)

Kählerian reduction

12<sup>50</sup>–13<sup>30</sup> Huijun Fan (Peking University)

On gauged linear sigma model

 $13^{30} - 15^{00}$  Lunch

 $Afternoon\ session$ 

Chairman: Evgenii Chirka

15<sup>00</sup>–15<sup>40</sup> Alexandre Sukhov (University of Lille; Institute of Mathematics with Computing Centre — Subdivision of the Ufa Federal Research Centre of RAS)

Some aspects of analysis on almost complex manifolds

 $15^{40}$ – $16^{00}$  Coffee break

16<sup>00</sup>–16<sup>40</sup> Chungchun Yang (Nanjing University)

Nevanlinna's value distribution theory, its applications and conjectures

16<sup>50</sup>–17<sup>20</sup> Semen Nasyrov (Kazan Federal University)

Nuttall's decomposition of a three-sheeted Riemann surface of genus one

17<sup>30</sup>: Welcome Party (9th floor)

### Tuesday, March 19

Morning session

Chairman: Stefan Nemirovskii

11<sup>00</sup>–11<sup>40</sup> Xiangyu Zhou (Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing)

Some recent results on transcendental techniques in complex geometry

 $11^{40}$ – $12^{00}$  Coffee break

12<sup>00</sup>–12<sup>40</sup> Stanislaw Janeczko (Warsaw University of Technology) Geometric and algebraic restrictions of differential forms

12<sup>50</sup>–13<sup>30</sup> Martin Schlichenmaier (University of Luxembourg)

 $N\ point\ Virasoro\ algebras\ are\ multi-point\ Krichever-Novikov\ type\ algebras$ 

 $13^{30} - 15^{00}$  Lunch

Afternoon session

Chairman: Xiangyu Zhou

 $15^{00}$ – $15^{40}$  Tuen Wai Ng (The University of Hong Kong) The squeezing functions on planar domains

15<sup>50</sup>–16<sup>30</sup> Valery Serov (University of Oulu) Scattering and spectral problems for perturbations of multidimensional biharmonic

operator  $16^{30}-16^{50}$  Coffee break

16<sup>50</sup>–17<sup>20</sup> Il'dar Musin (Institute of Mathematics with Computer Centre — Subdivision of the Ufa Federal Research Centre of RAS)

Linear operators on Fock type spaces

 $17^{30} - 18^{00}$  Gulmirza Khudayberganov (National University of Uzbekistan named after M. Ulugbek, Tashkent)

Matrix domains in the theory functions of several complex variables

# Wednesday, March 20

Excursion to the Kremlin and to the Red Square (with its surroundings). Conference dinner.

## Thursday, March 21

Morning session

Chairman: Peter Heinzner

 $10^{30}$ – $11^{10}$  Sergey Kislyakov (St. Petersburg Department of Steklov Mathematical Institute of the Russian Academy of Sciences)

Interpolation for intersections of certain Hardy-type spaces

11<sup>20</sup>–12<sup>00</sup> Ryoichi Kobayashi (Nagoya University)

Rigidity of compact holomorphic curves in compact complex parallelizable manifolds  $\Gamma\backslash SL(2,\mathbb{C})$  and its geometric applications

 $12^{00}$ – $12^{20}$  Coffee break

12<sup>20</sup>–13<sup>00</sup> Siye Wu (National Tsing Hua University, Taiwan)

Deformation of the prequantum action on a symplectic manifold

13<sup>10</sup>–13<sup>50</sup> August Tsikh (Siberian Federal University, Krasnoyarsk)

Convexity properties for complements of analytic sets and their amoebas

 $13^{50} - 15^{30}$  Lunch

15<sup>30</sup>–17<sup>00</sup> Visit to Laboratory of Popularization and Promotion of Mathematics and sightseeing tour of Steklov Mathematical Institute. Start at room 313, 3rd floor.

 $Afternoon\ session$ 

Chairman: Ryoichi Kobayashi

 $17^{10}\text{--}17^{50}$ Akira Yoshioka (Tokyo University of Science)

Non-formal star product and star functions

 $17^{50}$ – $18^{10}$  Coffee break

 $18^{10} \hbox{--} 18^{40}$ Farit Avkhadiev (Kazan Federal University)

 $Hardy\ and\ Rellich\ type\ conformally\ invariant\ inequalities$ 

 $18^{50} – 19^{20}$  Alexey Karapetyants (Southern Federal University, Rostov-on-Don)

On a class of Hausdorff-Berezin operators on the unit disc

### Friday, March 22

Morning session

Chairman: Martin Schlichenmaier

11<sup>00</sup>–11<sup>40</sup> Ngaiming Mok (The University of Hong Kong)

 $Uniformization\ problems\ on\ subvarieties\ of\ finite\text{-}volume\ quotient\ spaces\ of\ bounded\ symmetric\ domains$ 

 $11^{40}$ – $12^{00}$  Coffee break

 $12^{00}$ – $12^{40}$  Oleg Mushkarov (Institute of Mathematics and Informatics of the Bulgarian Academy of Sciences, Sofia)

Partial integrability of almost complex structures

12<sup>50</sup>–13<sup>30</sup> Alfonso Montes-Rodríguez (University of Seville)

Uniform sampling along characteristics for solutions of the telegraph system

 $13^{30} - 15^{00}$  Lunch

 $Afternoon\ session$ 

Chairman: Valery Serov

 $15^{00} \hbox{--} 15^{40}$  Anatol Odzijewicz (University of Białystok)

Quantization and groupoid of partially invertible elements of  $W^*$ -algebra

15<sup>50</sup>–16<sup>30</sup> Francesco Dell'Accio (University of Calabria)

Multinode rational operators for scattered data interpolation

 $16^{30}$ – $16^{50}$  Coffee break

16<sup>50</sup>–17<sup>20</sup> Roland Duduchava (The University of Georgia; A.Razmadze Mathematical Institute, Tbilisi, Georgia)

Boundary value problems on hypersurfaces and  $\Gamma$ -convergence

17<sup>30</sup>–18<sup>00</sup> Vladislav Kravchenko (Southern Federal University, Rostov-on-Don)

 $Construction\ of\ transmutation\ operators\ and\ application\ to\ direct\ and\ inverse\ spectral\ problem$