



DECEMBER 14-18, 2025, SOCHI (SIRIUS)

INTERNATIONAL WORKSHOP ON OPERATOR THEORY AND HARMONIC ANALYSIS

OTHA FALL 2025 <https://otha.sfedu.ru/workshop-otha-fall-2025>, otha.conference@gmail.com

SCIENTIFIC PROGRAMM & SCHEDULE OF EVENTS

MONDAY 15.12.2025 Location: «Delta Sirius» hotel, Sochi, Triumphalny Avenue, 1, Conference Room №1E.

10:00-13:15	Plenary Session (Conference Room №1E)		
10:00-10:30	Shkalikov Andrey	Spectral problems generated by systems of ordinary differential equations	Chairman – Karapetyants Alexey
10:35-11:05	Kravchenko Vladislav	Implementation of the inverse scattering transform method for the nonlinear Schrödinger equation	
11:10-11:40	Li Changpin	Numerical method for diffusion-wave equation with time fractional psi-Caputo derivative	
11:40-12:10	Coffee break		
12:10-12:40	Kusraev Anatoly	Farkas Lemma for Linear and Multilinear operators	Chairman – Shkalikov Andrey
12:45-13:15	Karapetyants Alexey	Toeplitz operators, weighted spaces, and hyperbolic geometry	

13:15-14:25 Lunch («Delta Sirius» hotel, Sochi, Triumphalny Avenue, 1, Conference Room №1E).

14:25-16:40 Plenary Session (Conference Room №1E)

14:25-16:40	Plenary Session (Conference Room №1E)		
14:25-14:55	Nazaikinskii Vladimir	Maslov's canonical operator: new formulas and effective asymptotics	Chairman – Turilova Ekaterina
15:00-15:30	Solodov Aleksei	On the convergence conditions of the weak greedy algorithm	
15:35-16:05	Turilova Ekaterina	Violation of Bell's inequalities in Jordan triples and Jordan algebras	Chairman – Nazaikinskii Vladimir
16:10-16:40	Avetisyan Zhirayr	Mixed-Fourier-norm spaces and holomorphic functions	

TUESDAY 16.12.2025 Location: «Delta Sirius» hotel, Sochi, Triumphalny Avenue, 1, Conference Room №1E.

10:00-13:15	Plenary Session (Conference Room №1E)		
10:00-10:30	Berezhnoi Eugenij	Two-sided estimates of Lebesgue constants for spaces of functions	Chairman – Nazarov Alexander
10:35-11:05	Dobrokhotov Sergey	Spectral problems in domains with boundary without boundary conditions, billiards with semi-rigid walls and asymptotics of long coastal waves	
11:10-11:40	Muravnik Andrey	Cauchy problem for nonstationary differential-difference equations: series expansions of solutions	
11:40-12:10	Coffee break		
12:10-12:40	Nazarov Alexander	Fractional powers of operators as traces of operator-valued functions of real variable	Chairman – Kusraeva Zalina
12:45-13:15	Guariglia Emanuel	Chebyshev wavelets, Vieta-Lucas wavelets and connection coefficients	
13:15-14:25	Lunch («Delta Sirius» hotel, Sochi, Triumphalny Avenue, 1, Conference Room №1E.).		
14:25-16:05	Plenary Session (Conference Room №1E)		

14:25-16:05	Plenary Session (Conference Room №1E)		
14:25-14:55	Arsenovic Milos	Harmonic mixed norm spaces: Carleson measures and Toeplitz operators	Chairman – Muravnik Andrey
15:00-15:30	Debbouche Amar	Stability and optimality criteria for a mathematical model of infectious diseases	
15:35-16:05	Kusraeva Zalina	Hahn-Banach theorem: old and new	

WEDNESDAY 17.12.2025 Location: «Delta Sirius» hotel, Sochi, Triumphalny Avenue, 1, Conference Room №1E.

10:00-19:00 Excursion. A bus departs from the «Delta Sirius» hotel at 10:00.

Invited speakers:

Shkalikov Andrey (Russia), Kravchenko Vladislav (Mexico/Russia), Kusraev Anatoly (Russia), Karapetyants Alexey (Russia), Nazaikinskii Vladimir (Russia), Dobrokhotov Sergey (Russia), Turilova Ekaterina (Russia), Avetisyan Zhirayr (Armenia), Li Changpin (China), Arsenović Miloš (Serbia), Berezhnoi Eugenij (Russia), Solodov Aleksei (Russia), Muravnik Andrey (Russia), Debbouche Amar (Algeria), Guariglia Emanuel (Italy), Nazarov Alexander (Russia), Kusraeva Zalina (Russia)

Participants and members of the organizing committee:

Vasileva-Bagler Elena (Russia), Samko Dmitry (Russia), Kira Khmel'nitskaya (Mexico), Andreeva Tatiana (Russia), Lady Estefania Murcia Lozano (Mexico), Karapetyants Georgiy (Russia), Novikov Tikhon (Russia).

Cameraman:

Samko Dmitry (Russia)

All lectures will be videotaped and then uploaded on Internet.

**OTHA workshops are part of the OTHA conference/workshops/seminars/editorial activities <https://otha.sfedu.ru/> , <http://msrn.sfedu.ru/>
Supported by the Regional Mathematical Center, project of the Ministry of Science and Higher Education of Russian Federation, agreement № 075-02-2025-1720 dated 28.02.2025.**



Announcements and activities of the international research network OTHA (Operator Theory and Harmonic Analysis, <https://msrn.sfedu.ru/>)



Announcements and activities of the Regional Mathematical Center of the Southern Federal University (rmc.sfedu.ru, msrn.sfedu.ru, otha.sfedu.ru).