

DAAD - Project in the framework of the Stability Pact for South East
Europe
Center of excellences for applications of mathematics

Intensive course
Microlocal Analysis, Wave Fronts and Propagation of Singularities

September 16 - 21, 2013

Faculty of Sciences, Novi Sad,
Department of Mathematics and Informatics
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Lecturers on the intensive course:

[Stevan Pilipović](#), University of Novi Sad, Serbia

[Nenad Teofanov](#), University of Novi Sad, Serbia (with the assistance of
Filip Tomic

Registration: September 16th, 15h

Departure date: September 21th

Accommodation: Hotel "[Fontana](#)", Nikole Pasica 27. ([find it on the map](#)), approx. 25-30 minutes walking distance from the campus.
Alternatively, Taxi costs around 2 Euros.

Lectures will be held at the Department of Mathematics and Informatics,
Trg Dositeja Obradovica 4. ([find it on the map](#)) room 64 on the third
floor.

Topics

Basic notions and inequalities, Fourier transform on the Schwartz space,
definition of Gelfand-Shilov spaces
Characterizations of Gelfand-Shilov spaces, topological structure,
triviality, holomorphic extension
Operations on Gelfand-Shilov spaces
Smoothness and analyticity, growth of entire functions
Quasi-analytic classes, the Denjoy-Carleman theorem and its proofs
Regularity and support, wave-front sets
Oscillatory integrals, global pseudodifferential operators and their
basic properties
Anti-Wick operators, multipliers, convolutors
Localization operators, results for ultradistributions, bisingular
operators

☐ monday	☐ tuesday	☐ wednesday	☐ thursday	☐ friday	☐ 9-10:30	☐ sightseeing Novi Sad
☐ Quasianalyticity and wave front sets I	☐ Quasianalyticity and wave front sets II	☐ Quasianalyticity and wave front sets III	☐ 10:30-11	☐ coffee break	☐ coffee break	☐ coffee break
☐ 11-12:30	☐ Gelfand-Shilov spaces II	☐ Gelfand-Shilov spaces III	☐ Quasianalyticity and wave front sets IV	☐ 12:30-15	☐ lunch break	☐ lunch break
☐ lunch break	☐ 15-					

17:30 opening Gelfand-Shilov spaces I Pseudodifferential operators I Pseudodifferential operators II Pseudodifferential operators III

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III ☐ Quasianalyticity and wave front sets **IV** ☐ **12:30-15** ☐ lunch break ☐ lunch

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