

# I SUMMER SCHOOL IN TOPOLOGICAL ALGEBRA AND FUNCTIONAL ANALYSIS

This is an information about the First Summer School in Topological Algebra and Functional Analysis held on 22–31 July of 2003 in the school-internat of the village Koziowa in Carpathian Mountains near Skole of Lviv region. The School was organized by the Faculty of Mechanics and Mathematics of Ivan Franko Lviv National University and Ya. Pidstryhach Institute of Applied Problems of Mechanics and Mathematics of the National Academy of Sciences.

The aim of the School was to support talented Ukrainian students and post-graduates who are interested in fundamental mathematical research in fields related to Topological Algebra or Functional Analysis and supply them with the newest information concerning the current status of these fields. More than 50 participants (including 10 Doctors and 17 Candidates of Sciences) from the principal scientific centers of Ukraine (Kyiv, Chernivtsi, Donetsk, Ivano-Frankivsk, Kirovohrad, Kharkiv, Lviv, Simferopol, Ternopil) took part in the work of the School and contributed to its scientific program.

The Summer School had the following main components:

- the mornings were devoted to lectures on topics indispensable for a future fruitful work of young mathematicians in Topological Algebra or Functional Analysis;
- in the afternoons the younger participants presented short talks on their scientific researches;
- evenings were devoted to discussions, sports and active recreation on the air.

During the school the participants attended the following survey lecture courses (approximately 3-4 hours each):

- “*Spaces of smooth and generalized vectors of a closed operator in Banach space in various problems of mathematical analysis*” by M.L. Horbachuk (Kyiv Institute of Mathematics);
- “*Selected Topics in Commutative Banach Algebras*” by A.V. Zagorodnyuk and O.V. Lopushanskyĭ (Ya. Pidstryhach IAPMM, Lviv);
- “*Separate and Joint Continuity of Functions*” by V.K. Maslyuchenko (Chernivtsi National University);
- “*Selected Topics in Measure Theory*” by T.O. Banakh (Lviv National University);
- “*Integration in Banach Spaces: Selected Topics*” by V.M. Kadets (Kharkiv National University);
- “*The Quest for Asymptology*” by I.V. Protasov (Kyiv National University);
- “*Asymptotic Topology*” by M.M. Zarichnyĭ (Lviv National University);
- “*Dimension Theory*” by T.M. Radul (Lviv National University);
- “*Representations of compact groups and Ponriagin Duality*” by I. Guran (Lviv National University);
- “*Geometric Group Theory*” by V.I. Sushchanskyĭ (Kyiv National University);
- two survey lectures “*Invariant subspace and scalar+compact problems for operators in Banach spaces*” and “*On sequential properties of dual unit ball in weak\* topology*” by A.M. Plichko (Kirovohrad Pedagogical University).

Informally, the School consisted of two blocks. The first one (Wednesday–Saturday, 23–26 of July) had Functional Analytic while the second part (Monday–Thursday, 28–31 of July) had Topological character. The Sunday (27 of July), separating these two blocks, was devoted to tourist events: there was a bus excursion to Dovbush Rocks (ruins of rock fortress of IX–XI centuries) and to ruins of Tustan’ fortress near Urych. Besides these official events, there were many informal evenings filled with sincere discussions, singing etc.

The organizing Committee thanks all the participants (professors and students) for their contribution to successful work of the School and hopes for their support in organizing future summer schools.

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