



International  
Scientific Conference

# Algebraic and Geometric Methods of Analysis

26-30 may 2020  
Odesa, Ukraine

## LIST OF TOPICS

- Algebraic methods in geometry
- Differential geometry in the large
- Geometry and topology of differentiable manifolds
- General and algebraic topology
- Dynamical systems and their applications
- Geometric problems in mathematical analysis
- Geometric and topological methods in natural sciences

## ORGANIZERS

- Ministry of Education and Science of Ukraine
- Odessa National Academy of Food Technologies
- Institute of Mathematics of the National Academy of Sciences of Ukraine
- Odessa I. I. Mechnikov National University
- Taras Shevchenko National University of Kyiv
- International Geometry Center
- Kyiv Mathematical Society

## PROGRAM COMMITTEE

<b>Chairman: Prishlyak A.</b> ( <i>Kyiv, Ukraine</i> )	<b>Kiosak V.</b> ( <i>Odesa, Ukraine</i> )	<b>Pokas S.</b> ( <i>Odesa, Ukraine</i> )
<b>Balan V.</b> ( <i>Bucharest, Romania</i> )	<b>Kirillov V.</b> ( <i>Odesa, Ukraine</i> )	<b>Polulyakh E.</b> ( <i>Kyiv, Ukraine</i> )
<b>Banakh T.</b> ( <i>Lviv, Ukraine</i> )	<b>Konovenko N.</b> ( <i>Odesa, Ukraine</i> )	<b>Sabitov I.</b> ( <i>Moscow, Russia</i> )
<b>Bolotov D.</b> ( <i>Kharkiv, Ukraine</i> )	<b>Lyubashenko V.</b> ( <i>Kyiv, Ukraine</i> )	<b>Savchenko A.</b> ( <i>Kherson, Ukraine</i> )
<b>Borysenko O.</b> ( <i>Kharkiv, Ukraine</i> )	<b>Maksymenko S.</b> ( <i>Kyiv, Ukraine</i> )	<b>Sergeeva A.</b> ( <i>Odesa, Ukraine</i> )
<b>Cherevko Ye.</b> ( <i>Odesa, Ukraine</i> )	<b>Matsumoto K.</b> ( <i>Yamagata, Japan</i> )	<b>Shelekhov A.</b> ( <i>Tver, Russia</i> )
<b>Fedchenko Yu.</b> ( <i>Odesa, Ukraine</i> )	<b>Mormul P.</b> ( <i>Warsaw, Poland</i> )	<b>Volkov V.</b> ( <i>Odesa, Ukraine</i> )
<b>Karlova O.</b> ( <i>Chernivtsi, Ukraine</i> )	<b>Mykhailyuk V.</b> ( <i>Chernivtsi, Ukraine</i> )	<b>Zarichnyi M.</b> ( <i>Lviv, Ukraine</i> )
	<b>Plachta L.</b> ( <i>Krakov, Poland</i> )	

## ADMINISTRATIVE COMMITTEE

- Egorov B., chairman, rector of the ONAFT;
- Povarova N., deputy chairman, Pro-rector for scientific work of the ONAFT;
- Mardar M., Pro-rector for scientific-pedagogical work and international communications of the ONAFT;
- Fedosov S., Director of the International Cooperation Center of the ONAFT;
- Kotlik S., Director of the P.M. Platonov Educational-scientific institute of computer systems and technologies "Industry 4.0";
- Svytyy I., Dean of the Faculty of Computer Systems and Automation.

## ORGANIZING COMMITTEE

Kirillov V.  
Konovenko N.  
Fedchenko Yu.

Maksymenko S.  
Cherevko Ye.

Osadchuk E.  
Prus A.

ІНТЕРНАЦІОНАЛЬНИЙ ЦЕНТР СПІВРОБОТИ

## Some remarks on the Metrizable of F-metric spaces

**Sumit Som**

(Department of Mathematics, National Institute of Technology Durgapur, India.)

*E-mail:* somkakdwip@gmail.com

**Ashis Bera**

(Department of Mathematics, National Institute of Technology Durgapur, India.)

*E-mail:* beraashis.math@gmail.com

**Lakshmi Kanta Dey**

(Department of Mathematics, National Institute of Technology Durgapur, India.)

*E-mail:* lakshmikdey@yahoo.co.in

In this talk, we will show that the newly introduced  $\mathcal{F}$ -metric spaces, introduced by Jleli and Samet in [1], are metrizable. Also, we deduce that the notions of convergence, Cauchy sequence, completeness due to Jleli and Samet for  $\mathcal{F}$ -metric spaces are equivalent to that of usual metric spaces. Moreover, we show that the Banach contraction principle in the context of  $\mathcal{F}$ -metric spaces is a direct consequence of its standard metric counterpart.

### REFERENCES

- [1] M. Jleli and B. Samet. On a new generalization of metric spaces. *J. Fixed Point Theory Appl.*, 20(3):128, (2018).

<b>I. Kuznietsova, S. Maksymenko</b> <i>On the squares of diffeomorphisms of surfaces</i>	<b>40</b>
<b>K. Matsumoto</b> <i>A recurrent (CHR)-curvature tensor field in a trans-Sasakian manifold</i>	<b>41</b>
<b>N. Mazurenko, M. Zarichnyi</b> <i>Spaces of probability measures and box dimension</i>	<b>43</b>
<b>L. Michalak</b> <i>Framed cobordism of systems of submanifolds in the classification of free quotients</i>	<b>44</b>
<b>F. G. Mukhamadiev</b> <i>The density and the <math>\tau</math>-placed of the <math>N_\tau^\varphi</math>-nucleus of a space <math>X</math></i>	<b>45</b>
<b>I. V. Mykytyuk</b> <i>Ricci-flat Kähler metrics on tangent bundles of rank-one symmetric spaces of compact type</i>	<b>47</b>
<b>A. Y. Narmanov, A. N. Zoyidov</b> <i>On the group of isometries of foliated manifolds</i>	<b>49</b>
<b>I. Petkov, V. Ryazanov</b> <i>On boundary behavior by prime ends of solutions to Beltrami equations</i>	<b>50</b>
<b>L. Plachta</b> <i>Some topological obstructions for strong coloring of uniform hypergraphs</i>	<b>51</b>
<b>S. Maksymenko, E. Polulyakh</b> <i>On quotient spaces and their spaces of continuous maps</i>	<b>53</b>
<b>A. Prishlyak, A. Prus</b> <i>Topology of flows with collective dynamics on surfaces</i>	<b>54</b>
<b>V.M. Prokip</b> <i>On similarity of two families of matrices over a field</i>	<b>56</b>
<b>A. M. Romaniv, N. S. Dzhaliuk</b> <i>Some connections between invariant factors of matrix and its submatrix</i>	<b>57</b>
<b>Y. Sachkov</b> <i>Conjugate time in sub-Riemannian problem on Cartan group</i>	<b>58</b>
<b>A. Sadullaev, F. Mukhamadiev</b> <i>The density and the local density of the space of permutation degree</i>	<b>59</b>
<b>U. Samanta</b> <i>A short note on Hurewicz and <math>\mathcal{L}</math>-Hurewicz properties in topological spaces</i>	<b>60</b>
<b>O. Sazonova</b> <i>About one class of Continual distributions with screw modes</i>	<b>62</b>
<b>A. Serdyuk, T. Stepanyuk</b> <i>Asymptotically best possible Lebesgue inequalities on the classes of generalized Poisson integrals</i>	<b>64</b>
<b>A. Ya. Narmanov, X. F. Sharipov</b> <i>Differential invariants of transformations group</i>	<b>66</b>
<b>S. Som, A. Bera, L. K. Dey</b> <i>Some remarks on the Metrizable of <math>F</math>-metric spaces</i>	<b>67</b>
<b>V. Starodub, R. Skuratovskii</b> <i>Triangle Cubics and Conics</i>	<b>69</b>
<b>T. P. Mokritskaya, A. V. Tushev</b> <i>On some fractal-based estimations of subsidence volume for various types of soils</i>	<b>71</b>
<b>Jun Ueki</b> <i>Non-acyclic <math>SL_2</math>-representations of twist knots and non-trivial <math>L</math>-invariants</i>	<b>73</b>