21st International Summer School Global Analysis and its Applications

A) General Relativity: 100 years after Hilbert, Part IIB) Cartan geometries and Lie algebroids

Organizers

Lepage Research Institute, Czech Republic University of Prešov, Slovakia Eötvös Loránd University, Hungary Jagiellonian University in Kraków, Poland

Program

Monday, 15 August		
9:00	Opening the Summer School	
Courses		
9:15–10:45	Salvatore Capozziello – Physical and Mathematical Applications of	
	Extended Gravity	
10:45–11:15	Coffee break	
11:15–12:45	Gennadi Sardanashvily – Noether Theorems and Applications	
Workshop		
15:00–15:30	Sebastian Bahamonde – Modified teleparallel theories of gravity	
15:30–16:00	Manuel Hohmann – Finsler spacetimes with spherical and	
	cosmological symmetry	
16:00–16:20	Coffee break	
16:20–16:50	Marek Szydlowski – Sewn singularities-a new type of singularities in	
	f(R) Palatini cosmology	
16:50–17:20	Martin Krssak – Generalized Teleparallel Gravity Theories	

Tuesday, 16 August

Courses	
9:00–10:30	Salvatore Capozziello – Physical and Mathematical Applications of
	Extended Gravity
10:30-11:00	Coffee break
11:00–12:30	Gennadi Sardanashvily – Noether Theorems and Applications
15:00–16:30	David Saunders – Cartan Geometries and Lie Algebroids
16:30–16:50	Coffee break
Workshop	
16:50–17:50	Dmitry Zenkov – On Hamel's Equations for Infinite-Dimensional
	Mechanical Systems

Wednesday, 17 August

9:00 Excursions

- a) Kezmarok Castle and Belianska Cave
- b) Slovak Paradise (hiking trip)

Thursday, 18 August

Courses

9:00–10:30	Gennadi Sardanashvily - Noether Theorems and Applications
10:30-11:00	Coffee break
11:00-12:30	David Saunders – Cartan Geometries and Lie Algebroids

Workshop (contributions and posters)

15:00-16:00	Demeter Krupka – Natural Lagrange Structures
16:00–16:20	Coffee break
16:20–16:50	Amar Debbouche – Approximate controllability of fractional
	differential systems with nonlocal conditions in Hilbert spaces
16:50–17:20	Eliška Klozová – Higher-Dimensional Rotating Black Holes
17:20–17:50	Chayan K. Mishra – Curvature Inheritance Symmetry

19:00 Conference dinner

Friday, 19 August

Courses		
9:00–10:30	Salvatore Capozziello – Physical and Mathematical Applications of	
	Extended Gravity	
10:30-11:00	Coffee break	
11:00-12:30	David Saunders – Cartan Geometries and Lie Algebroids	
Workshop (contributions and posters)		
15:00-15:30	Konstantinos Dialektopoulos - Cosmological solutions in f(G,T) gravity	
15:30–16:00	Erico Tanaka – TBA	

16:00–16:20	Coffee break
16:20–16:50	Artur Gizycki – Representation of transformation groupoids and
	imprimitivity systems
16:50–17:20	Gourab Bhattacharya – A Dual version of Narsimhan-Seshadri Theorem
	in Seiberg - Witten Gauge Theories
17:20–17:50	Jafar Sadeghi – The correction of Horava-Lifshitz black hole from
	holographic and P-V critically