



XXI GEOMETRICAL SEMINAR

June 26 - July 2, 2022, Belgrade, Serbia

PROGRAM

Sunday, June 26, 2022

9 ⁰⁰ -17 ⁰⁰	ARRIVAL DAY
17 ⁰⁰ - 19 ⁰⁰	Registration

Legend	on line lectures are in blue color
	lectures in person are in black color

Monday, June 27, 2022.

7 ³⁰ - 9 ⁰⁰		Registration
9 ⁰⁰ - 9 ²⁰		Opening ceremony
9 ²⁰ - 10 ⁰⁰		Cocktail
CHAIR	M. Đorić	ROOM 1
10 ⁰⁰ -10 ³⁰	L. Vrancken	The curvature tensor of 6 dimensional nearly Kähler spaces
10 ³⁵ - 11 ⁰⁵	S. Ivanov	Solution of the qc Yamabe equation on a 3-Sasakian manifold, extremals of the Sobolev-Folland-Stein inequality on the quaternionic Heisenberg groups and the qc Yamabe problem
11 ¹⁰ - 11 ⁴⁰	E. Garcia-Rio	Conformally flat Kähler structures
11 ⁴⁵ - 12 ¹⁵	M. Mateljević	The Ahlfors-Schwarz lemma, curvature, distance and distortion
12 ²⁰ - 12 ⁵⁰	E. Molnar (M. Stojanovic)	Hyperbolic crystal geometry To honour of János Bolyai on the 220 th anniversary of his birth
13 ⁰⁰ - 14 ⁵⁵		LUNCH BREAK
CHAIR	S. Ivanov	ROOM 1
15 ⁰⁰ -15 ³⁰	S. Trapani	Kähler hyperbolicity and Lang conjecture
15 ³⁵ -16 ⁰⁵	Lj. Velimirović	Shape and energies of geometric objects
16 ¹⁰ -16 ⁴⁰	L. Kauffman	Knot dynamics
CHAIR	M. Arsenović	ROOM 2
15 ⁰⁰ -15 ³⁰	C.L. Bejan	Generic submanifolds of almost contact metric manifolds
15 ³⁵ -16 ⁰⁵	V. Andrejić	Proportionality in Riemannian Osserman manifolds
16 ¹⁰ -16 ⁴⁰	M. Knežević	Some properties of the quasi-conformal diffeomorphisms of the unit disc
16 ⁴⁰ -17 ¹⁰		Coffee break
CHAIR	M. Pontecorvo	ROOM 1
17 ¹⁰ -17 ⁴⁰	E. Hulett	Surfaces immersed in $so(n + 1)$, related to conformal harmonic maps into S_n , for $n > 2$
17 ⁴⁵ -18 ⁰⁵	M. Salvai	A split special Lagrangian calibration associated with helicity
18 ¹⁰ -18 ⁴⁰	D. Ilyutko	Cross graphs: checkerboard embeddings, intersection graphs and minor theory
CHAIR	Lj. Velimirović	ROOM 2
17 ¹⁰ -17 ²⁵	M. Zlatanović	Some connections on non-symmetric gravitational theory
17 ³⁰ -17 ⁴⁵	N. Vesić	Universal method of obtaining invariants for geometric mapping
17 ⁵⁰ -18 ⁰⁵	V. Milenković	Geodesic mappings of generalized Einstein spaces onto Riemannian space
18 ¹⁰ -18 ²⁵	J. Stojanov	Eigenproblem of tensors - a geometrical viewpoint
18 ³⁰ -18 ⁴⁵	A. Šebeković	On the Roter type of generalised Wintgen ideal Legendrian submanifolds
18 ⁵⁰ -19 ⁰⁵	A. Velimirović	On equitorsion conformal and concircular transformations
19 ⁴⁵ - 23 ⁰⁰		WELCOME PARTY

Tuesday, June 28, 2022.

CHAIR	M. Antić	ROOM 1
8 ³⁰ -9 ⁰⁰	D. Alekseevsky	Clifford algebras and homogeneous convex cones: applications information geometry and supergravity
9 ⁰⁵ -9 ³⁵	A. Tuzhilin	Isometric embeddings into Gromov-Hausdorff class
9 ⁴⁰ -10 ¹⁰	Y. Nikonorov	Finite homogeneous metric spaces with special properties
10 ¹⁵ -10 ⁴⁵	E. Kudryavtseva	Symplectic invariants of structurally stable singularities of integrable systems
10 ⁴⁵ -11 ¹⁵		Coffee break
CHAIR	S. Vukmirović	
11 ¹⁵ - 11 ⁴⁵	T. Šukilović	Geometry of cotangent space of Heisenberg group
11 ⁵⁰ -12 ²⁰	M. Arsenović	Functions harmonic and M-harmonic in the unit polydisc
12 ²⁵ -12 ⁵⁵	M. Brozos-Vazquez	Smooth metric measure spaces and the Einstein equation
13 ⁰⁰ -13 ³⁰	S. Lambropoulou	Braidings, braid equivalences and Jones-type invariants
13 ³⁰ - 14 ⁵⁵		LUNCH BREAK
CHAIR	B. Jovanović	ROOM 1
15 ⁰⁰ -15 ³⁰	A. Vesnin	Volumes of polyhedrain hyperbolic 3-space with applications to the knot theory
15 ³⁵ -16 ⁰⁵	T. Panov	Holomorphic foliations on complex moment-angle manifolds
16 ¹⁰ -16 ⁴⁰	N. Šešum	Dynamics of convex mean curvature flows
CHAIR	E. Garcia-Rio	ROOM 2
15 ⁰⁰ -15 ³⁰	M. Pontecorvo	On bi-Hermitian surfaces
15 ³⁵ -15 ⁵⁰	M. Đorić	Hypersurfaces of the homogeneous nearly Kähler S3 × S3 with Pslant normal vector field
15 ⁵⁵ -16 ¹⁰	M. Najdanović	Small deformations, variations and energies of curves
16 ¹⁵ -16 ⁴⁵	I. Gogić	On noncommutative branched coverings
16 ⁴⁵ -17 ¹⁰		Coffee break
CHAIR	S. Stepanov	ROOM 1
17 ¹⁰ -17 ⁴⁰	V. Sakbaev	Invariant measures of Hamiltonian flows and random walks in Hilbert space
17 ⁴⁵ -18 ¹⁵	G. Nosovsky	Manifold hypothesis in data analysis. Dimension estimation.
18 ²⁰ -18 ⁵⁰	L. Efremova	On dynamics of simplest skew products on n-dimensional (n ≥ 2) cells, cylinders and tori
18 ⁵⁵ -19 ¹⁰	M. Akbiyik	The matrices of Pauli quaternions, their De Moivre's formulas
CHAIR	V. Milousheva	ROOM 2
17 ¹⁰ -17 ²⁵	M. Cvetković	Helicoid and curvature based functional variations
17 ³⁰ -17 ⁴⁵	V. Milenković	On almost geodesic mappings of the second type of spaces with non-symmetric affine connection and Nijenhuis tensor
17 ⁵⁰ -18 ⁰⁵	N. Đurđević	Umbilical CR submanifolds of the nearly Kähler S3 × S3

Wednesday, June 29, 2022

7⁴⁵-19⁰⁰

EXCURSION

Thursday, June 30, 2022.

CHAIR	S. Nikčević	ROOM 1
8 ³⁰ -9 ⁰⁰	P. Blagojević	Facet volumes of polytopes
9 ⁰⁵ -9 ³⁵	V. Balashchenko	Invariant structures on homogeneous Φ -spaces and Lie groups
9 ⁴⁰ -10 ¹⁰	M. Radnović	Billiard games and books
10 ¹⁵ -10 ⁴⁵	M. Stošić	New invariants of knots and 3-manifolds
10 ⁴⁵ -11 ¹⁵		Coffee break
CHAIR	V. Rovenski	
11 ¹⁵ - 11 ⁴⁵	S. Terzić	Singularities of the T^n -action on the Grassmann manifolds $G_{n,2}$ and their resolution
11 ⁵⁰ - 12 ²⁰	R. Živaljević	The problem of envy-free division from the view point of algebraic topology
12 ²⁵ -12 ⁵⁵	Đ. Baralić	Random moment angle complex
13 ⁰⁰ -13 ³⁰	G. Hall	Classification of tensors on 4-dimensional manifolds of neutral signature
13 ³⁰ - 14 ⁵⁵		LUNCH BREAK
CHAIR	M. Brozos-Vazquez	ROOM 1
15 ⁰⁰ -15 ³⁰	D. Millionshchikov	Einstein derivations of nilpotent Lie algebras
15 ³⁵ -16 ⁰⁵	I. Limonchenko	Generalized virtual polytopes and cohomology rings of torus manifolds
16 ¹⁰ -16 ⁴⁰	I. Dimitrijević	Cosmological solutions of a nonlocal gravity model
16 ⁴⁵ -17 ¹⁵	F. Bajardi	Modified gravity with the Gauss-Bonnet invariant
CHAIR	C. L. Bejan	ROOM 2
15 ⁰⁰ -15 ³⁰	H. Yıldırım	$\delta\sharp(2, 2)$ -ideal hypersurfaces of dimension 4 in centroaffine differential geometry
15 ³⁵ -16 ⁰⁵	A. Lipkovski	On quiver representations of digraphs associated with finite rings
16 ¹⁰ -16 ⁴⁰	V. Milousheva	Canonical Weierstrass representation of minimal Lorentz surfaces in pseudo-Euclidean 4-space with neutral metric
16 ⁴⁵ -17 ¹⁵	I. Dimitrić	Chen type of spherical hypersurfaces via the second standard immersion of the sphere
17 ¹⁵ -17 ⁴⁵		Coffee break
CHAIR	R. Živaljević	ROOM 1
17 ⁴⁵ -18 ¹⁵	V. Dragović	Chebyshev dynamics, isoharmonic deformations, and constrained Schlesinger systems
18 ²⁰ -18 ⁵⁰	N. Lazarov	Geodesic equations in the weak field limit of general $f(R)$ gravity theory
18 ⁵⁵ -19 ²⁵	D. Damjanović	On the centralizer rigidity phenomenon
CHAIR	I. Dimitrijević	ROOM 2
17 ⁴⁵ -18 ⁰⁰	F. Jevtić	Geometry of Bier spheres
18 ⁰⁵ -18 ²⁰	D. Đokić	The sixth power moment of Dirichlet L-functions over rational function fields
18 ²⁵ -18 ⁴⁰	M. Babić	Horospherical coordinates and curvature properties of complex hyperbolic space equipped with different left-invariant metrics
18 ⁴⁵ -19 ⁰⁰	Đ. Kocić	Real hypersurfaces in $S_6(1)$ equipped with structure Jacobi operator satisfying $LX \perp \nabla X$

Friday, July 1, 2022.

CHAIR	Z. Rakić	ROOM 1
8 ³⁰ -9 ⁰⁰	I. Taimanov	On the formality problem for manifolds with special holonomy
9 ⁰⁵ -9 ³⁵	F. Popelensky	Combinatorial Ricci flows on closed surfaces
9 ⁴⁰ -10 ¹⁰	H. Fan	LG/CY correspondence between tt*-geometry
10 ¹⁵ -10 ⁴⁵	M. I. Munteanu	Magnetic Jacobi fields in almost contact metric manifolds
10 ⁴⁵ -11 ¹⁵		Coffee break
CHAIR	G. Hall	
11 ¹⁵ - 11 ⁴⁵	V. Rovenski	On the geometry of a weakened f-structure
11 ⁵⁰ -12 ²⁰	S. Capozziello	The gravitational energy-momentum pseudotensor in higher-order theories of gravity
12 ²⁵ -12 ⁵⁵	D. Borka	Bounds on graviton mass from planetary motion in the Solar System
13 ⁰⁰ -13 ³⁰	J. Stanković	Nonlocal de Sitter gravity and its exact cosmological solutions
13 ³⁰ - 14 ⁵⁵		LUNCH BREAK
CHAIR	L. Vrancken	ROOM 1
15 ⁰⁰ -15 ³⁰	K. Polthier	Boundary-sensitive Hodge decompositions
15 ³⁵ -16 ⁰⁵	J. Van der Veken	Lagrangian submanifolds of the complex quadric
16 ¹⁰ -16 ⁴⁰	K. Trenčevski	Global scheme of the basic interactions and their geometrical interpretations
CHAIR	S. Terzić	ROOM 2
15 ⁰⁰ -15 ³⁰	B. Jovanović	Bogoyavlenski conjecture and classification of multiplicity free and almost multiplicity free subgroups
15 ³⁵ -16 ⁰⁵	B. Gajić	Spherical and planar ball bearings as nonholonomic problems
16 ¹⁰ -16 ⁴⁰	A. Đurđevac	Rough homogenization for diffusions on fluctuating Helfrich surfaces
16 ⁴⁰ -17 ¹⁰		Coffee break
CHAIR	H. Yildirim	ROOM 1
17 ¹⁰ -17 ⁴⁰	G. Belozerv	Integrable billiards and its applications
17 ⁴⁵ -18 ¹⁵	O. Belova	The space of centered planes and generalized bilinear connection
18 ²⁰ -18 ³⁵	G. Solomadin	On the homotopy colimit description for quotients of moment-angle complexes
18 ⁴⁰ -18 ⁵⁵	M. Petrović	On generalized almost para-Hermitian spaces
19 ⁰⁰ -19 ¹⁵	F. Kürüz	Pell and Pell-Lucas hybrid quaternions
CHAIR	Đ. Baralić	ROOM 2
17 ¹⁰ -17 ⁴⁰	J. Mikeš	On geodesic mappings and their generalizations
17 ⁴⁵ -18 ¹⁵	S. Stepanov	Geometry in the large on Hadamard manifolds
18 ²⁰ -18 ⁵⁰	N. Guseva	On rotary mappings
18 ⁵⁵ -19 ¹⁰	A. Dekić	Classification of left invariant Riemannian metrics on complex hyperbolic space
20 ⁰⁰ - 24 ⁰⁰		FAREWELL PARTY

Saturday, July 2, 2022

CHAIR	T. Šukilović	ROOM 1
9 ³⁵ -10 ⁰⁵	R. Mirzaei	Convex functions and isometric actions on Lorentzian manifolds
10 ¹⁰ -10 ⁴⁰	E. Nešović	Generalized Darboux frame of a spacelike curve lying on a lightlike surface in Minkowski 3-space
10 ⁴⁰ -11 ¹⁰		Coffee break
CHAIR	B. Gajić	
11 ¹⁰ - 11 ⁴⁰	P. Melentijević	Gaussian curvature conjecture for minimal graphs
11 ⁴⁵ - 12 ¹⁵	P. Guha	Multifaceted curl forces and noncentral forces.
12 ²⁰ - 12 ³⁵	A. Dağdeviren	On hybrid quaternions
12 ⁴⁰ - 13 ¹⁰	A. Savo	The heat content functional and isoparametric foliations
		CLOSING CEREMONY