



# XVII GEOMETRICAL SEMINAR

September 3-8, 2012, Zlatibor, Serbia

# PROGRAM

# Monday, September 3, 2012.

7 – 8 <sup>30</sup>		Registration
8 <sup>30</sup> - 9 <sup>40</sup>		Opening ceremony
9 <sup>45</sup> - 10 <sup>15</sup>		Cocktail
<b>CHAIR</b>	<b>A. Tuzhilin</b>	
10 <sup>20</sup> – 10 <sup>50</sup>	P. Gilkey	Homogeneous 4-dimensional Kaehler-Weyl structures
10 <sup>55</sup> – 11 <sup>25</sup>	L. Vrancken	Almost complex surfaces in the nearly Kaehler $S^3 \times S^3$
11 <sup>30</sup> – 12 <sup>00</sup>	M. Pontecorvo	On a question of Vaisman concerning complex surfaces
12 <sup>05</sup> – 12 <sup>35</sup>	M. Mateljević	On harmonic quasiconformal quasi-isometries with respect to quasi-hyperbolic and Euclidean metrics
12 <sup>40</sup> – 14 <sup>55</sup>		LUNCH BREAK
<b>CHAIR</b>		ROOM 1
15 <sup>00</sup> -15 <sup>30</sup>	M. Antić	Affine hypersurfaces with warped product structure
15 <sup>35</sup> -16 <sup>05</sup>	M. Radnović	Confocal quadratics in pseudo-Euclidean space
16 <sup>10</sup> -16 <sup>40</sup>	S. Jablan	Unknotting and ascending numbers of knots and their families
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
<b>CHAIR</b>		ROOM 1
17 <sup>10</sup> -17 <sup>40</sup>	S. Minčić	On curvature tensors and Ricci type identities in manifolds with non-symmetric affine connection
17 <sup>45</sup> -18 <sup>15</sup>	S. Stepanov	Tachibana, Killing and planar r-numbers
18 <sup>20</sup> -18 <sup>50</sup>	J. Mikeš	Geodesic and holomorphically projective mappings
<b>CHAIR</b>		ROOM 1
19 <sup>00</sup> -19 <sup>15</sup>	A. De	Contact CR-warped product submanifolds of a quasi-sasakian manifold
19 <sup>20</sup> -19 <sup>35</sup>	I. Tastan	On special spacetimes
<b>CHAIR</b>		ROOM 2
15 <sup>00</sup> -15 <sup>30</sup>	F. Toppan	Critical scaling dimension for D-module reps of N=4,5,7 superconformal algebras and constraints on superconformal mechanics
15 <sup>35</sup> -16 <sup>05</sup>	E. Beltaos	Fixed points and D-branes
16 <sup>10</sup> -16 <sup>40</sup>	E. Kudryavtseva	The topology of spaces of functions with prescribed singularities on surfaces
		Coffee break
<b>CHAIR</b>		ROOM 2
17 <sup>10</sup> -17 <sup>40</sup>	B. Gajić	On integrability of Kirchhoff and Chaplygin cases of Kirchhoff equations
17 <sup>45</sup> -18 <sup>15</sup>	Z. Dušek	The existence of light-like homogeneous geodesics
18 <sup>20</sup> -18 <sup>50</sup>	I. Kozlov	The topology of Liouville foliation for the Kovalevskaya integrable case on the Lie algebra $\mathfrak{so}(4)$
<b>CHAIR</b>		ROOM 2
19 <sup>00</sup> -19 <sup>15</sup>	Lj. Radović	Mirror-curve codes for knots and links
19 <sup>20</sup> -19 <sup>35</sup>	Dj. Baralić	Generalized Steiner's and Kirkmans's Points of Pascal's Mystic Hexagram
20 <sup>00</sup> – 22 <sup>00</sup>		D I N N E R

## Tuesday, September 4, 2012.

CHAIR	B. Jovanović	
9 <sup>00</sup> -9 <sup>30</sup>	V. M. Buchstaber	Symplectic nilmanifolds and applications
9 <sup>35</sup> -10 <sup>05</sup>	S. Terzić	Combinatorial structure of Grassmann manifolds stratification
10 <sup>10</sup> -10 <sup>40</sup>	D. Millionshchikov	Variety of nilpotent Lie algebras and symplectic structures
10 <sup>40</sup> -11 <sup>10</sup>		Coffee break
CHAIR	D. Blair	
11 <sup>10</sup> - 11 <sup>40</sup>	O. Kowalski	On curvature-homogeneous spaces of type (1,3)
11 <sup>45</sup> -12 <sup>15</sup>	R. Deszcz	On quasi-Einstein manifolds
12 <sup>20</sup> -12 <sup>50</sup>	U. C. De	On almost pseudo conformally symmetric manifolds with applications to relativity
12 <sup>55</sup> - 14 <sup>55</sup>		LUNCH BREAK
CHAIR		ROOM 1
15 <sup>00</sup> -15 <sup>30</sup>	M. Okumura	On definitions of certain submanifolds of complex manifold
15 <sup>35</sup> -16 <sup>05</sup>	K. Matsumoto	Twisted product CR-submanifolds in a locally conformal Kaehler manifold
16 <sup>10</sup> -16 <sup>40</sup>	Y. Matsuyama	Curvature pinching for complete totally real submanifolds of a complex projective space
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
CHAIR		ROOM 1
17 <sup>10</sup> -17 <sup>40</sup>	V. Andrejić	Duality principle and special Osserman manifolds
17 <sup>45</sup> -18 <sup>15</sup>	A. V. Cadarella	The curvature of Lorentzian S- manifolds with an Osserman-type condition
18 <sup>20</sup> -18 <sup>50</sup>	D. Ilyutko	Extremal networks in normed planes and Maxwell formula
CHAIR		ROOM 1
19 <sup>00</sup> -19 <sup>15</sup>	M. Ćirić	On geodesic mappings and geodesic deformations of generalised Riemannian spaces
19 <sup>20</sup> -19 <sup>35</sup>	K. Panagiotidou	Results on three-dimensional real hypersurfaces of complex space form
19 <sup>40</sup> -19 <sup>45</sup>	I. Hinterleitner	On holomorphically projective mappings
CHAIR		ROOM 2
15 <sup>00</sup> -15 <sup>30</sup>	T. Popelensky	TBA
15 <sup>35</sup> -16 <sup>05</sup>	T. Popov	Homotopy commutative algebra and 2-nilpotent Lie algebra
16 <sup>10</sup> -16 <sup>40</sup>	I. Rudskiy	Representation of the cellular architecture of plants as a space with free group action
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
CHAIR		ROOM 2
17 <sup>10</sup> -17 <sup>40</sup>	K. Trenčevski	On the osculating spaces of submanifolds in Euclidean spaces
17 <sup>45</sup> -18 <sup>15</sup>	R. Pacheco	Harmonic maps of finite uniton number into $G_2$
18 <sup>20</sup> -18 <sup>50</sup>	K. R. Stevanović-Hedrih	Angular velocities and accelerations of the basic vector of a kinetic position vector tangent space in different curvilinear coordinate systems
CHAIR		ROOM 2
19 <sup>00</sup> -19 <sup>15</sup>	B. Prvulović	Vector fields on Grassmann manifolds
19 <sup>20</sup> -19 <sup>35</sup>	M. Knežević	A note on Schwarz lemma for harmonic quasi-conformal mappings
20 <sup>00</sup> - 22 <sup>00</sup>		DINNER

## Wednesday, September 5, 2012.

CHAIR	B-Y. Chen	
8 <sup>45</sup> -9 <sup>15</sup>	D. E. Blair	<i>D</i> -homothetic warping
9 <sup>20</sup> -9 <sup>50</sup>	B. Opozda	Bochner Weitzenbock formulas for connections compatible with metric tensor fields
9 <sup>55</sup> -10 <sup>25</sup>	E. Garcia-Rio	Local rigidity of symplectic pairs and four-dimensional generalized symmetric spaces
10 <sup>30</sup> -11 <sup>00</sup>		Coffee break
CHAIR	D. Millionshchikov	
11 <sup>00</sup> - 11 <sup>30</sup>	B. Dragovich	On geometry in modern cosmology
11 <sup>35</sup> - 12 <sup>05</sup>	G. Hall	Some remarks on Weyls conformal and projective tensors
12 <sup>10</sup> -12 <sup>40</sup>	E. Hullet	Spacelike surfaces, their Gauss lifts and one-parameter deformations
12 <sup>45</sup> - 14		LUNCH BREAK
14 <sup>10</sup> - 20 <sup>00</sup>		EXCURSION

# Thursday, September 6, 2012.

CHAIR	E. Garcia-Rio	
9 <sup>00</sup> -9 <sup>30</sup>	Y. Nikolayevsky	Conformal relatives of symmetric spaces
9 <sup>35</sup> -10 <sup>05</sup>	V. Balashchenko	Invariant structures and distributions on homogeneous k-symmetric spaces
10 <sup>10</sup> -10 <sup>40</sup>	A. M. Naveira	Some geometric properties of certain naturally reductive homogeneous spaces derived through curvature
10 <sup>40</sup> -11 <sup>10</sup>		Coffee break
CHAIR	B. Opozda	
11 <sup>10</sup> - 11 <sup>40</sup>	A. A. Tuzhilin	One-dimensional Gromov minimal fillings
11 <sup>45</sup> - 12 <sup>15</sup>	M. I. Munteanu	Killing magnetic trajectories in 3-dimensional Riemannian manifolds
12 <sup>20</sup> -12 <sup>50</sup>	E. Molnar	On geometrization of orbifolds
12 <sup>55</sup> - 14 <sup>55</sup>		LUNCH BREAK
CHAIR		ROOM 1
15 <sup>00</sup> -15 <sup>30</sup>	F. Dillen	Submanifolds of product spaces
15 <sup>35</sup> -16 <sup>05</sup>	G. Bande	Metric contact pairs (bicontact manifolds)
16 <sup>10</sup> -16 <sup>40</sup>	A. Lotta	Special metrics on almost CR manifolds
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
CHAIR		ROOM 1
17 <sup>10</sup> -17 <sup>40</sup>	S. Rosemann	On transformation groups preserving certain geometric structures
17 <sup>45</sup> -18 <sup>15</sup>	C. M. Garcia	On Bezier surfaces in three-dimensional Minkovski space
18 <sup>20</sup> -18 <sup>50</sup>	A. Prieto-Martin	Generalized S-space-form
CHAIR		ROOM 1
19 <sup>00</sup> -19 <sup>15</sup>	B. Kirik	On nearly quasi-Einstein manifolds
19 <sup>20</sup> -19 <sup>35</sup>	O. Gursoy	On global invariance of the line geometry
CHAIR		ROOM 2
15 <sup>00</sup> -15 <sup>30</sup>	S. Smirnov	Semidiscrete Toda Lattices
15 <sup>35</sup> -16 <sup>05</sup>	G. Sharygin	Full symmetric Toda flow and Bruhat order of permutation group
16 <sup>10</sup> -16 <sup>40</sup>	O. Vaneeva	Admissible transformations in classes of PDEs
		Coffee break
CHAIR		ROOM 2
17 <sup>10</sup> -17 <sup>40</sup>	Z. Olszak	On the Schouten-van Kampen connection on almost paracontact metric manifolds
17 <sup>45</sup> -18 <sup>15</sup>	G. V. Nosovskiy	Applicability of Laplace transform for fractional PDE with variable rate of derivatives
18 <sup>20</sup> -18 <sup>50</sup>	H. Yildirim	Contacts of spacelike hypersurfaces in the lightcone with $\varphi$ -hyperbolic flat hyperquadrics
CHAIR		ROOM 2
19 <sup>00</sup> -19 <sup>15</sup>	S. Rančić	Geodesic patterns of surfaces
19 <sup>20</sup> -19 <sup>35</sup>	M. Bjelica	Flows on edges of simplex
19 <sup>35</sup> -19 <sup>50</sup>	K. Kukić	Discriminantly separable polynomials and integrable systems
20 <sup>00</sup> - 24 <sup>00</sup>		CONFERENCE PARTY

## Friday, September 7, 2012.

<b>CHAIR</b>	<b>P.B. Gilkey</b>	
9 <sup>00</sup> -9 <sup>30</sup>	B-Y Chen	$\delta$ -invariants and Lagrangian submanifolds of complex space forms
9 <sup>35</sup> -10 <sup>05</sup>	I. Dimitrić	Chen type of the isometric hypersurfaces in the unit sphere
10 <sup>10</sup> -10 <sup>40</sup>	M. Prvanović	A note on holomorphically projective curvature tensor of an anti-Kaehler manifold
10 <sup>40</sup> -11 <sup>10</sup>		Coffee break
<b>CHAIR</b>	<b>V. M. Buchstaber</b>	
11 <sup>10</sup> - 11 <sup>40</sup>	T. Panov	Intersections of quadratics and H-minimal Lagrangian submanifolds
11 <sup>45</sup> - 12 <sup>15</sup>	B. Jovanović	Contact flows and integrable systems
12 <sup>20</sup> -12 <sup>50</sup>	A. Savo	Spectral estimates and isometric group actions
12 <sup>55</sup> - 14 <sup>55</sup>		Lunch break
<b>CHAIR</b>		<b>ROOM 1</b>
15 <sup>00</sup> -15 <sup>30</sup>	S. Nikolaienko	Topology of the Liouville foliation in the integrable case of Goryachev in the problem of motion of a rigid body in fluid
15 <sup>35</sup> -16 <sup>05</sup>	B. C. Montano	Nullity conditions and Sasaki-Einstein/paraSasaki-Einstein metrics
16 <sup>10</sup> -16 <sup>40</sup>	S. Montaldo	Biconservative surfaces in space forms
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
<b>CHAIR</b>		<b>ROOM 1</b>
17 <sup>10</sup> -17 <sup>40</sup>	G. Dileo	Levi-paralle contact Riemannian manifolds
17 <sup>45</sup> -18 <sup>15</sup>	L. Brunetti	On the classification of Lorentzian Sasaki space forms
18 <sup>20</sup> -18 <sup>35</sup>	A. Hinić Galić	Totally geodesic subalgebras for various inner products on nilpotent Lie algebras
18 <sup>40</sup> -18 <sup>55</sup>	I. Dimitrijević	Nonlocal modified gravity
19 <sup>00</sup> -19 <sup>15</sup>	M. Moulin Ribeiro Merkle	TBA
19 <sup>20</sup> -19 <sup>35</sup>	I. Sypchenko	TBA
<b>CHAIR</b>		<b>ROOM 2</b>
15 <sup>00</sup> -15 <sup>30</sup>	P. Giordano	Theory of infinitely near points in smooth manifolds: the Fermat functor
15 <sup>35</sup> -16 <sup>05</sup>	A. Zheglov	An analogue of the KP theory in dimension two
16 <sup>10</sup> -16 <sup>40</sup>	Tee-How Loo	A commutative condition on the holomorphic distribution of real hypersurfaces in a complex projective space
16 <sup>40</sup> -17 <sup>10</sup>		Coffee break
<b>CHAIR</b>		<b>ROOM 2</b>
17 <sup>10</sup> -17 <sup>40</sup>	Lj. Velimirović	On the shape of bendable shell
17 <sup>45</sup> -18 <sup>00</sup>	M. Stojanović	One family of hyperbolic space groups with simplicial domains
18 <sup>05</sup> -18 <sup>20</sup>	J. Stojanov	Dynamical system of cancer cell population in the Finsler framework
18 <sup>25</sup> -18 <sup>40</sup>	T. Šukilović	Detection of arbitrary geometric shapes using discrete curvature
18 <sup>45</sup> -19 <sup>00</sup>	N. Vesić	Differential geometry and matrices
19 <sup>05</sup> -19 <sup>20</sup>	V. Veličković	TBA
20 <sup>00</sup> - 22 <sup>00</sup>		<b>D I N N E R</b>