

 PROGRAM ICDG'2014 

**FOURTH INTERNATIONAL
COLLOQUIUM ON
DIFFERENTIAL GEOMETRY
AND ITS RELATED FIELDS**

Veliko Tarnovo
September 08 – 11, 2014

<http://icdg.web.nitech.ac.jp/ICDG2014-index.html>

 PROGRAM ICDG'2014 

4th International Colloquium on Differential Geometry and its Related Fields

Date September 8 (Mon) — 11 (Thur), 2014

Place Rectorat Building, Europe Hall, St. Cyril and St. Methodius University
Veliko Tarnovo, Bulgaria

Program

September 8 (Mon)

9:00 – 9:10 Opening ICDG'14

Morning Session Chairman: Prof. Hristov, Milen (Veliko Tarnovo Univ.)

9:15 – 10:00 Prof. Sakane, Yusuke (Osaka Univ.)

New homogeneous Einstein metrics on compact simple Lie groups

10:15 – 11:00 Prof. Nakova, Galya (Veliko Tarnovo Univ.)

Curvature properties of some lightlike hypersurfaces of almost complex manifolds with Norden metric

11:15 – 12:00 Prof. Nakata, Fuminori (Fukushima Univ.)

Circle invariant indefinite Einstein-Weyl structures and the twistor correspondence

Afternoon Session Chairman: Prof. Nakova, Galya (Veliko Tarnovo Univ.)

13:45 – 14:30 Mr. Iliev, Krassen & Prof. Hristov, Milen (Veliko Tarnovo Univ.)

On the Laplace-matrix calculus

14:45 – 15:30 Prof. Adachi, Toshiaki (Nagoya Institute of Tech.)

Kähler graphs – Discrete models of manifolds equipped with magnetic fields

15:45 – 16:30 Mr. Yaermainaiti, Tuerxunmainaiti (Nagoya Institute of Tech.)

Laplacians for Kaehler graphs

16:45 – 17:30 *Scientific communications*

September 9 (Tues)

Morning Session Chairman: Prof. Sakane, Yusuke (Osaka Univ.)

9:00 – 9:45 Prof. Matsuzoe, Hiroshi (Nagoya Institute of Tech.)

Geometry of deformed exponential families

10:00 – 10:45 Prof. Ivanov, Nikolay (Veliko Tarnovo Univ.)

Noncommutative Instantons

11:00 – 11:45 Prof. Kamada, Hiroyuki (Miyagi Univ. of Education)

Geometric structure modeled on a real hypersurface in a quaternionic manifold

Afternoon Session Chairman: Prof. Hashimoto, Hideya (Meijo Univ.)

13:45 – 14:30 Prof. Ohashi, Misa (Nagoya Institute of Tech.)

A method of determining the $SO(7)$ -invariants for curves in $\text{Im } O$ by their G_2 -invariants

14:45 – 15:30 Ms. Bencheva, Victoria & Prof. Hristov, Milen (V. Tarnovo Univ.)

On the differential geometry of Laplace-transformed curves

15:45 – 16:30 Prof. Hristov, Milen (Veliko Tarnovo Univ.)

Matrix Approach to curves in the complex plane and its conformal and Laplace transformations

16:45 – 17:30 *Scientific communications*

September 10 (Wed)

Morning Session Chairman: Prof. Manev, Mancho (Plovdiv Univ.)

9:00 – 9:45 Prof. Shoda, Toshihiro (Saga Univ.)

On zero eigenfunctions of Jacobi operator on a minimal surface

10:00 – 10:45 Prof. Ganchev, Georgi (Bulgarian Academy Sci.)

Special surfaces in the three or four-dimensional Euclidean and Minkowski spaces and their natural PDEs

11:00 – 11:45 Prof. Kanchev Krassimir (Univ. of Transport, Sofia)

Explicit Solving of the System of Natural PDE's of Minimal Surfaces in the Four-Dimensional Euclidean Space

Afternoon Session Chairman: Prof. Ganchev, Georgi (Bulgarian Acad. Sci.)

13:45 – 14:30 Prof. Ando, Naoya (Kumamoto Univ.)

Local characterizations of surfaces in various spaces by induced metrics and principal distributions

14:45 – 15:30 Prof. Manev, Mancho (Plovdiv Univ.)

On the geometry of canonical connections on manifolds with complex and contact structures and Norden-type metrics

15:45 – 16:30 Mr. Manev, Hristo (Provdiv Univ.) & Prof. Ivanova, Miroslava (Trakia Univ.)

On some Lie groups as 5-dimensional almost contact B-metric manifolds

16:45 – 17:30 *Scientific communications*

September 11 (Thur)

Morning Session Chairman: Prof. Adachi, Toshiaki (Nagoya Inst. of Tech.)

9:00 – 9:45 Prof. Hashimoto, Hideya (Meijo Univ.)

On some constructions of G_2 and $\text{Spin}(7)$ bundles on a 3-manifold by using Clifford algebra of order 3

10:00 – 10:45 Prof. Monev Venelin, Prof. Maria Dzhumalieva-Stoeva (Veliko Tarnovo Univ.), Prof. Bouyukliev Iliya (Bulg. Acad. Sci.)

About the Correctness of the Classification Results on Binary Self-Dual Codes of Length 40

10:50 – 11:00 Closing ICDG'14.

19:00 Farewell party.

September 12 (Fri)

Excursion: Traditional and historical view of Bulgaria.

Scientific Prof. Georgi GANCHEV, Bulg. Acad. Sci. (Sofia, BULGARIA)

Advisors Prof. Kouei SEKIGAWA, Niigata University (Niigata, JAPAN)

ICDG'14 Prof. Toshikazu SUNADA, Meiji University (Tokyo, JAPAN)

Organizers Prof. Toshiaki ADACHI, (Nagoya Institute of Technology, JAPAN)

ICDG'14 Prof. Stefka BOUYUKLIEVA, (Veliko Tarnovo Univ., BULGARIA)

Prof. Hideya HASHIMOTO, (Meijo Univ., JAPAN)

Prof. Milen HRISTOV, (Veliko Tarnovo Univ., BULGARIA)