



**21st Scientific-Professional Colloquium on
Geometry and Graphics
SISAK
September 1–5, 2019**

ORGANIZER:

Croatian Society for Geometry and Graphics

PROGRAM

PROGRAM COMMITTEE:

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SPONSORS:

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SUNDAY, SEPTEMBER 1

17.00–19.00 Registration

19.00–21.00 DINNER

MONDAY, SEPTEMBER 2

7.00– 9.00 BREAKFAST

Morning session (Chair: E. Jurkin)

9.00– 9.10 OPENING

9.10– 9.50 Plenary lecture

D. Lordick: *Representation and Design of Ruled Surfaces Based on the Dual Unit Sphere*

9.55–10.20 COFFEE BREAK

10.20–10.35 B. Odehnal: *Remarks on Algebraic Geodesics on Quadrics*

10.40–10.55 H. Stachel: *Revisiting Quadrics: String Constructions and Movement of Conics*

11.00–11.10 PAUSE

11.10–11.25 T. Došlić: *Packing Stars in Fullerenes and other Polyhedra*

11.30–11.45 R. T. Kozma: *Dense Regular Ball Packings in Higher Dimensional Hyperbolic Spaces*

12.30–14.30 LUNCH



Afternoon session (Chair: M. Šimić Horvath)

- 15.00–15.40 Plenary lecture
G. Glaeser, F. Gruber: *Of Peacock Feathers, Ellipses on Toruses, Crop Circles and other Mysterious Things*
- 15.45–16.10 COFFEE BREAK
- 16.10–16.25 I. Talata: *Generalizations of Schönhardt's Polyhedron in the d -dimensional Euclidean Space*
- 16.30–16.45 L. Vörös: *A Set of Planar and Spatial Tessellations Based on Compound 3D Models of the 8D and 9D Cubes*
- 16.50–17.10 E. Molnár, I. Prok, J. Szirmai: *The 5-dimensional Regular Solids Move on the Computer 2-screen with Visibility*
- 19.00–21.00 DINNER

TUESDAY, SEPTEMBER 3

- 7.00– 9.00 BREAKFAST
- 9.00–19.00 EXCURSION - Lonjsko Polje
- 19.00–21.00 DINNER



WEDNESDAY, SEPTEMBER 4

7.00– 9.00 BREAKFAST

Morning session (Chair: S. Gorjanc)

9.00– 9.40 Plenary lecture

M. Petrović: *Geometric Genesis and Form Variation of Focal-Directorial Curves and Surface*

9.45–10.10 COFFEE BREAK

10.10–10.25 I. Protrka, Ž. Milin Šipuš, Lj. Primorac Gajčić: *Focal Sets of B-scrolls in Lorentz-Minkowski 3-space*

10.30–10.45 D. Velichová: *Beauties of Error Function*

10.50–11.00 PAUSE

11.00–11.15 J. Osztényi: *The Neighborhood Complexes of Almost s-stable Kneser Graphs*

11.20–11.35 A. Végh: *On Parallelotope Configuration*

12.30–14.30 LUNCH



Afternoon session (Chair: Ž. Milin Šipuš)

- 15.00–15.15 R. Rajić: *Orthogonality in $\mathbb{M}_n(\mathbb{C})$ and Geometry of the Numerical Range*
- 15.20–15.35 H.-P. Schröcker: *Geometry of Split Quaternion Factorization*
- 15.40–16.10 COFFEE BREAK
- 16.10–16.25 P. Zsombor-Murray: *Angular Proximity between Conics & Quadrics*
- 16.30–16.45 Z. Erjavec: *On Killing Magnetic Curves in $SL(2, \mathbb{R})$ Geometry*
- 16.50–17.00 PAUSE
- 17.00–17.20 POSTER SESSION
- D. Klemenčič, Z. Erjavec: *On Certain Classes of Weingarten Surfaces in $SL(2, R)$ Space*
- I. Kodrnja, M. Baniček, K. Fresl: *3D Graphic Statics via Grassmann Algebra*
- I. Kodrnja, H. Koncul: *An Artistic Approach to the Tesseract*
- Ž. Milin Šipuš, Lj. Primorac Gajčić, I. Protrka: *Parametrization of Null Scrolls as B-scrolls in 3-dimensional Lorentz-Minkowski Space*
- R. Štulić, M. Petrović, M. Vučić, M. Jovanović: *On Applications of Focal-Director Surfaces*
- 20.00–24.00 COLLOQUIUM DINNER



THURSDAY, SEPTEMBER 5

7.00– 9.00 BREAKFAST

Morning session (Chair: J. Beban Brkić)

9.00– 9.40 Plenary lecture

M. Stavrić, A. Wiltzsche: *Architectural Geometry – Practical Use and Applications*

9.45–10.10 COFFEE BREAK

10.10–10.25 S. Porro, L. Cocchiarella: *Playing Architecture via Geometry and Graphics: Testing Unreal Engine*

10.30–10.45 N. Kovačević: *Using the GWS Model in the Conceptual Development of Rotation*

10.50–11.00 PAUSE

11.00–11.15 V. Volenec, Z. Kolar-Begović, R. Kolar-Šuper: *A Complete System of the Shapes of Triangles*

11.20–11.35 M. Šimić Horvath, E. Jurkin, V. Volenec: *On Some Properties of Parabola in Isotropic Plane*

11.40–11.50 CLOSING

12.00–14.00 LUNCH

Departure