Monday, June 19, 2023

10:25-10:30		Opening
Chair		Bert Jüttler
10:30-11:20	Lubbes	IP: Singular loci and topology of surfaces containing two circles through each point
11:20-11:40	Frischauf	Bivariate quaternionic factorizations and surfaces that decompose into two circles
11:40-12:00	Schicho	Camera calibration using squares, spheres, or surfaces of revolution
12:00-14:00		lunch
Chair		Jan Vrsek
14:00-16:10	Vršek	Minisymposium: Algebraic Methods in Geometry (5 talks)
14:00-14:20	Alcázar	MS: Affine equivalences of rational and analytic parametric curves in arbitrary dimension
14:20-14:40	Krasauskas	MS: Singularities of Dupin cyclidic cubes
14:40-15:00	Menjanahary/ Hoxhaj	MS: Using algebraic geometry to reconstruct a Darboux cyclide from a calibrated camera picture
15:00-15:20	Sendra-Arranz	MS: Recovery of plane curves from branch points
15:20-15:50		coffee break
Chair		Jan Vrsek
15:50-16:10	Sendra	MS: Algebro-geometric methods to approach radical differential equations
16:10-16:30	Capco	Wall-crossings between classes of real affine cubic surfaces
16:30-16:50	Spartalis	On the singularities of the general 6-SPS platform
16:50-17:10	Siegele	A geometric approach on the factorization of motion polynomials
18:00		dinner

Tuesday, June 20, 2023

Chair		Zbynek Šír
9:00- 9:50	Žagar	IP: Optimal approximations by parametric polynomial curves and surfaces
9:50-10:10	Rasoulzadeh	Shape reconstruction of profile-affine surfaces
10:10-10:40		coffee break
Chair		Peter Salvi
10:40-12:00	Salvi	Minisymposium: Computer Aided Geometric Design (4 talks)
10:40-11:00	Mann	MS: A generalized blending scheme for arbitrary order of continuity between n-sided patches
11:00-11:20	Qin Kaikai	MS: Blending Bézier patch for multi-sided surface modeling
11:20-11:40	Reif	MS: Modeling and simulation with watertight trimmed NURBS surfaces
11:40-12:00	Várady	MS: Control point based multi-sided surfaces over curved, multi-connected domains
12:00-14:00		lunch
Chair		Mario Fiorovanti
14:00-14:20	Bán	Lipschitz tracing on discrete fields
14:20-14:40	Bongardt	Vector products and combinations of points, lines, and planes
14:40-15:00	Bálint	Analytic signed distance representation of polygons
15:00-15:20	Fábián	Line simplification with sequence of best approximations
15:20-15:50		coffee break
Chair		Roland Kunkli
15:15-16:10	Horváth	Second order geometric distance fields
16:10-16:30	Noa de Roos	Discrete Geometry: Applications of Stair Convexity
16:30-16:50	Kruppa	Approximation of disk B-spline curves by circle skinning
16:50-17:10	Chudy	Fast evaluation of derivatives of polynomial and rational Bézier curves
18:00		dinner

Chair		Josef Schicho
9:00- 9:50	Legerský	IP: Flexibility of frameworks using edge colorings
9:50-10:10	Rigas	Practical methods for approximate nearest neighbor search on non-Manhattan squares
10:10-10:40		coffee break
Chair		Hans-Peter Schröcker
10:40-11:00	Fioravanti	A symbolic analysis of the intersection curve between a torus and an ellipsoid
11:00-11:20	Dana-Picard	Topology of quartic loci resulted from lines passing through a fixed point and a conic
11:20-11:40	Mokriš	Using low-rank approximations of gridded data for spline surface fitting
11:40-12:00	Scholz	Deep learning based methods for geometric modeling
12:00-14:00		lunch
14:00		excursion
17:30		guided tour altar piece (Kefermarkt church)
18:30		conference dinner at Schlossbrauerei Weinberg

Thursday, June 22, 2023

Chair		Ulrich Reif
9:00- 9:50	Manni	IP: Maximally smooth splines on triangulations
9:50-10:10	Šír	Apollonian de Casteljau-type algorithms for complex rational Bézier curves
10:10-10:40		coffee break
Chair		Deepesh Toshniwal
10:40-12:00	Toshniwal	Minisymposium: Isogeometric Analysis (4 talks)
10:40-11:00	Dijkstra	MS: Local THB-spline Bézier projection
11:00-11:20	Shakur	MS: IGA for solving multiphase engineering problems with precise and explicit interface representation
11:20-11:40	Knez	MS: C^1 smooth isogeometric Clough-Tocher splines over a curved triangulation
11:40-12:00	Raffaelli/ Sharif- Moghaddam	Interactive design of discrete Voss nets and simulation of their rigid foldings
12:00-14:00		lunch
Chair		Marjeta Knez
14:00-14:20	Kapl	Adaptive isogeometric analysis with C^1 hierarchical splines on analysis-suitable G^1 multi-patch geometries
14:20-14:40	Šadl	One sided circular arc approximants
14:40-15:00	Valasek	Higher-order geometric Hermite interpolation of surfaces
15:00-15:20	Vlachkova	An improved algorithm for scattered data interpolation using quartic triangular Bézier surfaces
15:20-15:50		coffee break
Chair		Felix Scholz
15:15-16:10	Bizzari	On splitting spherical triangles into quadratic subpatches
16:10-16:30	Grasegger	Counting graph realizations on the sphere by graph splitting
16:30-16:50	Kosmač	Locally based construction of analysis-suitable G^1 multi-patch spline surfaces
16:50-17:10	Remsing	On a family of homogeneous spaces

Friday, June 23, 2023

Chair		Ivan Izmestiev
9:00- 9:50	Springborn	IP: Discrete conformal maps
9:50-10:10	Tervooren	Smooth and discrete cone-nets
10:10-10:40		coffee break
Chair		Gudrun Szewieczek
10:40-12:00	Szewieczek	Minisymposium: Differential Geometry (4 talks)
10:40-11:00	Brander	MS: New results on surfaces with harmonic Gauss maps
11:00-11:20	Lutz	MS: Canonical tessellations of decorated hyperbolic surfaces
11:20-11:40	Steinmeier	MS: Discrete (constrained) elastic curves as invariants of Bäcklund transformations
11:40-12:00	Yasumoto	MS: On timelike constant mean curvature surfaces in 3-dimensional Lorentz-Minkowski space
12:00-14:00		lunch
Chair		Bert Jüttler
14:00-14:20	Kapilavai	Singularity Distance Computation for Parallel Manipulators of Stewart-Gough Type
14:20-14:40	Ali	Preparing non-conforming meshes of B-Rep NURBS for DG-BEM simulations
14:40		Closing remarks

IP: Invited presentation
MS: Minisymposium presentation