



7th International Scientific Conference on Geometry
and Graphics **moNGometrija 2020**

18th -21st September 2020. Belgrade, Serbia

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CONFERENCE PROGRAM

Friday, September 18th, 2020

10:00-11:00	Registration of the participants on conference platform	Platform test
11:00-12:00	Conference opening ceremony	Opening ceremony of the Conference Message from the President of SUGIG – Zorana Jeli Message from the Vice-dean for International Cooperation of Faculty of Mechanical Engineering in Belgrade – Predrag Elek Accompanying program
12:00-13:00	Plenary lecture speaker	Marija Obradović <i>GEOMETRIC PROPERTIES OF THE “FLOWER”</i> <i>CONCAVE ANTIPRISMS OF THE SECOND SORT</i>

14:00-15:40	Session 1 Chair-Magdalena Dragović	
14:00	Monika Sroka-Bizoń, Piotr Dudzik, Tatjana Sankauskiene, Ewa Terczyńska, Jolanta Tofil, Krzysztof Tytkowski, Antanas Vansevicius <i>DIAD-TOOLS PLATFORM AS A REALIZATION THE IDEA OF EDUCATIONAL COOPERATION</i> E003	
14:20	Vesna Stojaković, Radovan Štulić <i>TEACHING PERCEPTION AS MOTIVATION FOR STUDENTS TO APPLY DESCRIPTIVE GEOMETRY AND PERSPECTIVE</i> E004	
14:40	Jelena Letić, Filip Mirčeski, Isidora Đurić, Ivana Vasiljević, Igor Kekeljević, Ratko Obradović <i>TEACHING RIGGING FOR ANIMATION AT THE COMPUTER GRAPHICS - ENGINEERING ANIMATION STUDIES</i> E007	
15:00	László Vörös <i>SETS OF PLANAR AND SPATIAL TESSELLATIONS BASED ON COMPOUND 3D MODELS OF THE 8D AND 9D CUBES AND ON RESTRUCTURED CONVEX UNIFORM HONEYCOMBS</i> T004	
15:20	Daniela Velichová <i>DIDACTIC VIDEO-MATERIALS FOR TEACHING CONSTRUCTIVE GEOMETRY COURSES</i> E001	

14:00-15:40	<i>Session 2</i> <i>Chair-Bojan Tepavčević</i>
14:00	Jelena Djokikj, Tatjana Kandikjan <i>PARAMETRIC DESIGN AS AN APPROACH FOR DESIGN FOR ADDITIVE MANUFACTURING</i> K013
14:20	Rodoljub Miličević, Miša Stojićević, Branislav Popokostantinović, Ivana Cvetković <i>GEOMETRIC PARAMETERS OF CLOCK DIAL</i> P024
14:40	Jelena Djokikj, Tashko Rizov, Tatjana Kandikjan, Risto Tashevski <i>INTRODUCING ADDITIVE MANUFACTURING AND AUGMENTED REALITY IN THE CONCEPTUAL PHASE</i> P029
15:00	Aleksandra Joksimović, Ivana Medojević, Nikola Veličković, Nikola Beljanski, Nikola Jovanović <i>DEVELOPMENT OF A VACUUM DRYING MODEL WITH A FOCUS ON 3D MODELING</i> E006
15:20	Aleksandra Stakić, Ognjen Ščepanović, Lazar Vidosavljević, Stefan Berdić <i>GEOMETRY USAGE FOR THE DESIGN OF STREAMLINED BODY</i> K015
16:00-17:20	<i>Session 3</i> <i>Chair Zsuzsanna Balajti</i>
16:00	Zlata Tosic, Sonja Krasic, Daniel Lordic, Jovana Stankovic <i>DISCRETIZATION AND OPTIMIZATION OF FREEFORM SURFACES WITH CIRCULAR MESHES FOR ADAPTING TO GRID SHELL STRUCTURES</i> P031
16:20	Nastasija Kocić, Sonja Krasić, Zlata Tošić, Jovana Stanković <i>APPLYING OF GRASSHOPPER IN GEOMETRIC OPTIMIZATION OF TORUS SHELL</i> K007
16:40	Radenka Kolarov, Milena Lakićević, Beata J. Gawryszewska <i>DESIGN STYLES IN LANDSCAPE ARCHITECTURE</i> P001
17:00	Nikoleta Stamenković, Marko Jovanović <i>PERFORATED PANEL DESIGN FOR DAYLIGHTING CONTROL</i> P009

Saturday, September 19th, 2020

10:00-11:40	<i>Session 4</i> <i>Chair-Vlada Gašić</i>
10:00	Peng-Fei Zheng, Da-Jun Lin, Qi An <i>DESIGN OF ACCURACY EVALUATION SYSTEM FOR SURFACE FLATTENING METHODS</i> K019
10:20	Violeta Contoloru, Anca Didu, Cristina Rotea, Magdalena Dragović, Alina Duta <i>COMFORT AND ELEGANCE IN AUTO DESIGN</i> K018
10:40	Dragan Lazarević, Maja Petrović, Aleksandar Trifunović, Momčilo Dobrodolac <i>SOLVING THE 3D BIN PACKING PROBLEM TO IMPROVE TRANSPORT EFFICIENCY</i> P012
11:00	Bojan Banjac, Miljan Djorđević, Milica Janković, Branko Malešević, Jelena Sučević <i>ONE METHOD FOR REAL TIME VISUALISATION OF EEG DATA</i> K012

11:20	Maja Čavić, Marko Penčić, Milan Rackov, Dijana Čavić, Vladimir Aljin <i>SYNTHESIS OF EPICYCLIC GEAR TRAIN AS A DRIVE FOR GENEVA MECHANISM</i> K003
10:00-11:40	<i>Session 5</i> <i>Chair-Marija Obradović</i>
10:00	Miloš Obradović, Jelena Kićanović, Marko Vučić <i>IMPLEMENTATION OF THE 3D MODEL COMPLEXITY IN VR ENVIRONMENT IN THE CASE OF NOVI SAD CITY CENTER</i> P010
10:20	Ivana Marcikić, Marijana Paunović <i>REVERSE PERSPECTIVE – DIFFERENT APPROACHES AND APPLICATIONS</i> P007
10:40	Miloš Obradović, Vesna Stojaković, Jelena Kićanović <i>INTERACTIVE PRESENTATION IN ARCHITECTURE BY VIRTUAL REALITY</i> P004
11:00	Djordje Djordjević, Mirjana Devetaković Radojević, Nikola Popović, Gordana Djukanović <i>ON POSSIBILITIES TO ENCODE ARTISTIC STYLE AND MANNER PRESENT IN A CONCRETE ARTWORK USING MICROPHOTOGRAMMETRY AND MATHEMATICAL STATISTICS/PROBABILITY TO PROCESS THEIR GEOMETRIC DETERMINANTS</i> P002
11:20	Iva Kodrnja <i>IS THE EARTH ROUND?</i> P023
12:00-13:40	<i>Session 6</i> <i>Chair-Maja Čavić</i>
12:00	Vlada Gašić, Ivan Milenović, Miloš Jovanović <i>CAD STRUCTURAL OPTIMIZATION OF LARGE CANTILEVER GIRDERS ON CRANES</i> K002
12:20	Lidija Matija, Boris Kosić, Branislava Jeftić, Ivana Stanković, Djuro Koruga <i>MIMICRY OF GEOMETRY AND DESIGN FROM THE NATURE AND BIOLOGY TO MATERIAL SCIENCE AND ENGINEERING</i> P025
12:40	Boris Kosić, Zorana Jeli, Aleksandra Dragičević, Miša Stojićević, Lidija Matija <i>GEOMETRY AND KINEMATICS OF HUMAN KNEE JOINT</i> P026
13:00	Dragoș-Laurențiu Popa, Branislav Popkonstantinović, Gabriel Buciu, Daniel Cosmin Calin <i>VIRTUAL EXPERIMENTAL TESTS APPLIED ON A REVISION PROSTHETIC HIP</i> K017
13:20	Branislav Popkonstantinović, Ratko Obradović, Branko Malešević, Miša Stojićević, Ivana Cvetković, Ivana Vasiljević <i>THE SYNTHESIS AND MOTION STUDY OF THE ASTRONOMICAL CLOCK MECHANISM</i> K016
12:00-13:40	<i>Session 7</i> <i>Chair-Lidija Matija</i>
12:00	Ivana Vasiljević, Ratko Obradović, Isidora Đurić, Željko Santoši, Miloš Obradović, Igor Budak <i>ACQUISITION OF PHOTOGRAPHS FOR PHOTOGRAMMETRIC RECONSTRUCTION OF SCULPTURE IN DIFFERENT LIGHTING CONDITIONS – INTERIOR AND IN THE EXTERIOR</i> K006

12:20	Marko Rusov, Boris Kosic, Dusan Berdić <i>USE OF MCLOREN GEOMETRIC TRANSFORMATIONS IN 3D SYNTHESIS OF MECHANISMS</i> K001
12:40	Alina Duta, Ionut - Daniel Geonea, Zorana Jeli, Ludmila Sass, <i>SIMULATION THE CONTACT SURFACE BETWEEN THE HOBBING CUTTER AND THE WHEEL ON FD320A MILLING MACHINE</i> P019
13:00	Miša Stojićević, Branislav Popkonstantinović, Zorana Jeli, Ivana Cvetković, Boris Kosic <i>GEOMETRY OF SOLAR TOWER USING ELLIPTICAL MIRROR</i> P021
13:20	Tashko Rizov, Risto Tashevski, Martin Zhivskovski <i>DESIGN OF A GAME CONTROLLER FOR PEOPLE WITH MOTOR IMPAIRMENT</i> K004
14:40-16:20	Session 8 <i>Chair-Tashko Rizov</i>
14:40	Sanja Janković, Vladan Nikolić, Sanja Spasić Djordjević <i>AUTOMATION AND PARAMETRIC DESIGN IN ARCHITECTURAL EDUCATION</i> E009
15:00	Petar Pejic, Jelena Pejic, Miodrag Mikic <i>AUGMENTED REALITY KITCHEN DESIGN</i> K011
15:20	Radovan Turović, Gorana Gojić, Dinu Dragan, Veljko Petrović <i>COMPARATIVE ANALYSIS OF METHODS FOR BLOOD VESSEL DETECTION IN RETINAL IMAGES</i> K008
15:40	Isidora Ratajac, Dimitrije Nikolić <i>ISOPHOTES OF ROTATIONAL CONE FOR CENTRAL LIGHTING</i> T001
16:00	Sanja Spasić Đorđević, Vladan Nikolić, Sanja Janković, Olivera Nikolić <i>PRINCIPLES OF TRANSFORMATION USED IN ARCHITECTURAL DESIGN AND THEIR IMPACT ON THE FORMS OF BUILDINGS</i> P011
14:40-17:20	Session 9 <i>Chair-Michal Zamboj</i>
14:40	Aleksandar Čučaković, Biljana Jović, Mirjana Očokoljić, Isidora Marković <i>THE CONTEMPORARY VISUALIZATION AND MODELLING TECHNOLOGIES AND TECHNIQUES FOR THE DESIGN OF THE GREEN ROOFS</i> P022
15:00	Anca Mihaela Barbu, Alina Duta, Dragos-Laurentiu Popa, Ramona Pinto <i>THE PRACTICE OF STRUCTURAL ANALYSIS AT THE "KULA" CONSTRUCTIONS</i> P013
15:20	Lidia Nataly Somarriba Sokolova, Marina Rynkovskaya <i>HELICAL SURFACES AND THEIR APPLICATION IN ARCHITECTURAL PARAMETRIC DESIGN</i> P032
15:40	Jean Paul Vladimir, Marina Rynkovskaya, Fabrice Mayaki Domingo, Elberdov Timur <i>THE METHODS OF 3D MODELING OF SEVERAL TYPES OF HELICOIDS</i> K014
16:00	Vladan Nikolić, Jasmina Tamburović, Olivera Nikolić, Sanja Spasić Djordjević, Sanja Jankovic <i>CONTEMPORARY ARCHITECTURAL GRAPHICS THE IMPACT OF AVANT-GARDE MOVEMENT</i> P038
17:00	Opening of exhibition "moNGeometrija2020"

Monday, 21st September

10:00-11:40	Session 10 Chair-Sonja Krsić
10:00	Hellmuth Stachel <i>PLÜCKER'S CONOID, HYPERBOLOIDS OF REVOLUTION AND ORTHOGONAL HYPERBOLIC PARABOLOIDS</i> T009
10:20	Michal Zamboj <i>VIZUALIZATION OF SINGULAR QUADRIC SECTIONS OF FOUR DIMENSIONAL CONES</i> T006
10:40	Zsuzsa Balajti, József Ábel <i>THE BIJECTIVE PART OF THE MONGE CUBOID FOR THE MAPPING OF THE HELIX AND A SPATIAL CURVE ARC</i> T007
11:00	Carmen Mârza, Georgiana Corsiuc, Ana Maria Graur <i>ABOUT THE GEOMETRY OF SOME FITTINGS USED IN FLAT-OVAL DUCTS</i> P003
11:20	Anita Pawlak-Jakubowska, Ewa Terczyńska <i>SHAPING THE PERCEPTION OF ENGINEERING OBJECTS BASED ON GEOMETRICAL MODELING</i> K010
10:00-11:40	Session 11 Chair-Ratko Obradović
10:00	Maja Petrović, Branko Malešević, Radovan Štulić, Ena Jurkin, Radomir Mijailović <i>SPATIAL INTERPRETATION OF ERDÖS-MORDELL INEQUALITY FOR POLYGONS OVER WEBERIAN FOCAL-DIRECTORIAL SURFACES</i> T003
10:20	Gordana Đukanović, Đorđe Đorđević, Mirjana Devetaković <i>OBTAINING OF PENCILS OF CURVES OF THE HIGHER ORDER USING THE SUPERSYMMETRY OF PENCILS OF CONICS</i> T005
10:40	Slobodan Mišić, Marija Backović <i>CONCAVE PYRAMIDS OF FOURTH SORT</i> T008
11:00	Tanja Mitrović, Vesna Stojaković <i>SIMULATION ANALYSIS OF THE SPATIAL DISTRIBUTION OF MARKET STALLS IN THE PUBLIC OPEN SPACE</i> P018
11:20	Ana-Maria Graur, Carmen Mârza, Georgiana Corsiuc <i>POLYHEDRA IN ARCHITECTURAL DESIGN</i> P008
12:00-13:40	Session 12 Chair-Hellmuth Stachel
12:00	Sonja Krsić, Zlata Tošić, Jovana Stanković, Nastasija Kocić <i>APPLICATION OF ADVANCED TEACHING METHODS AND ITS BENEFITS IN DESCRIPTIVE GEOMETRY II AT THE FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE IN NIŠ</i> E008
12:20	Melina-Andriani Kalama, Danai Tzoni, Ioanna Symeonidou <i>KERF BENDING: A GENEALOGY OF CUTTING PATTERNS FOR SINGLE AND DOUBLE CURVATURE</i> P034
12:40	Martin Friedrich Eichenauer, Daniel Lordick

	<i>BRUNO TAUT'S GLASHAUS - A MODEL FOR CONSTRUCTION TECHNIQUES OF TODAY - P035</i>
13:00	Magdalena Dragović, Svetlana Čičević, Aleksandar Čučaković <i>THE BENEFITS OF AN ADDITIONAL PRACTICE IN DESCRIPTIVE GEOMETRY COURSE: NON OBLIGATORY WORKSHOP AT THE FACULTY OF CIVIL ENGINEERING IN BELGRADE</i> E010
13:20	Ivana Bajanski, Bojan Tepavcevic <i>PERFORMANCE-BASED DESIGN IN ARCHITECTURAL AND URBAN PLANNING EDUCATION</i> E005
12:00-13:40	Session 13 <i>Chair-Carmen Marza</i>
12:00	Jovana Stanković, Sonja Krsić, Marko Nikolić, Zlata Tošić, Nastasija Kocić <i>APPLICATION OF GEOMETRIC SURFACES IN THE MUSEUM BUILDINGS OF DANIEL LIBESKIND</i> P037
12:20	Ana Perišić, Marko Lazić <i>PARAMETRIC ANALYSIS OF URBAN BLOCK GEOMETRY BASED ON VISUAL PRIVACY CONDITIONS PARAMETRIC – REFLECTING ON COVID-19 LOCKDOWN</i> P036
12:40	Radmila Đurašinović, Marko Jovanović <i>THE INTEGRATED DESIGN AND FABRICATION PROCESS FOR PLANAR MORPHING TESSELLATION</i> K005
13:00	Eygenia Ermakova, Marina Rynkovskaya <i>SHAPE AND ACOUSTIC INTERACTION IN LARGE CONCERT HALLS</i> P027
13:20	Teodora Nikolić, Dimitrije Nikolić, Marko Jovanović Vesna Stojaković <i>PARAMETRIC DESIGN OF RECTANGULAR FLAT VAULT</i> P017
14:00	Delivery of SUGIG Prize
14:30	Closing ceremony