Iva Kodrnja

January 16, 2020

EDUCATION

2011 – 2016	Faculty of Science, University of Zagreb Ph.D. in Mathematics Thesis title: *Models for Modular Curves, Modular Forms and η-quotients* Supervisor: Prof. Dr. Goran Muić
2008 – 2010	Faculty of Science, University of Zagreb M.S. in Mathematics Dissertation Title: *Smooth Projective Curves* Supervisor: Prof. Dr. Goran Muić
2005 –2008	Faculty of Science, University of Zagreb B.S. in Mathematics
2002 – 2006	Music school Vatroslav Lisinski, Zagreb, Croatia high-school diploma for piano player

EMPLOYMENT

2020 –	assistant professor Faculty of Geodesy, University of Zagreb
2017 – 2019	postdoctoral researcher Faculty of Civil Engineering, University of Zagreb
2011 – 2017	teaching assistant Faculty of Civil Engineering, University of Zagreb
2010 – 2011	teacher of Mathematics Elementary school K. Š. Gjalski, Zabok, Croatia
2010 – 2011	part-time teaching assistant Department of Mathematics, Faculty of Science, University of Zagreb

PUBLICATIONS

Scientific papers

- (with Baniček, M. and Fresl, K.) *Line geometry and 3D graphic statics,* GRAĐEVINAR, 71 (2019) 10, 863-875.
- (with Baniček, M. and Fresl, K.) *Graphic statics and Grassmann algebra,* Proceedings of Future trends in Civil Engineering, Zagreb, 2019, 304-323. *On a simple model of $X_0(N)$,* Monatshefte für Mathematik 186 (4), 2018, 653-661.
- *On a simple model of $X_0(N)$,* Monatshefte für Mathematik 186 (4), 2018, 653-661.
- (with Koncul, H.) *The Loci of Vertices of Nedian Triangles,* KoG **21**, 2017, 19-25.
- *Eta-quotients and embeddings of $X_0(N)$ in the projective plane,* Ramanujan Journal **46**, 2018, no. 2, 509-524.

Professional papers

- (with Baniček M. and Fresl K.) *Some examples of static equivalency in space using descriptive geometry and Grassmann algebra,* Proceedings of the IASS Annual Symposium 2018: Creativity in Structural Design, Boston, 2018, 341-349.
- (with Šamec E.) *The Heltocat Family of Surfaces*, KoG **19**, 2015, 57-64.

Submitted papers

- (with Muić, G.) *On primitive elements of algebraic function fields and models of* $X_0(N)$

Books

- (with Gorjanc S., Jurkin E. and Koncul H.) *Descriptive Geometry* (in Croatian), University Textbook, Faculty of Civil Engineering, Zagreb, 2018., (available at https://www.grad.hr/geometrija/udzbenik/)

RESEARCH EXPERIENCE

Member of research team on the project *Automorphic forms, representations and applications* funded by Croatian Science Foundation from 2014 to June 2018.

CONFERENCES ATTENDED

- 21st Scientific-Professional Colloquium on Geometry and Graphics, Sisak, Sep 2019 (posters)
- Bridges Linz 2019 - Mathematics, Art, Music, Architecture, Education, Culture (artwork)
- Summer School LGLS (Line Geometry for Lightweight Structures), Dresden, Oct 2018
- 4th Croatian Conference on Geometry and Graphics, Peroj, Sep 2018 (talk)
- Workshop: On some recent developments in local and global representation theory, Zagreb, May 2018 (talk)
- 20th Scientific-Professional Colloquium on Geometry and Graphics, Fužine, Sep 2017 (talk)
- 3rd Building Bridges - Workshop on Automorphic Forms and Related Topics , Sarajevo, Jul 2016 (talk)
- 6th Croatian Mathematical Congress, Zagreb, Jun 2016 (talk)
- Young Women in Algebraic Geometry, Bonn, Oct 2015 (poster)
- 18th Scientific - Professional Colloquium on Geometry and Graphics, Beli Manastir, Sep 2015 (talk)
- 3rd Croatian Conference on Geometry and Graphics, Supetar, Sep 2014,(talk and poster)
- 17th Scientific - Professional Colloquium on Geometry and Graphics, Rastoke, Sep 2013 (talk)
- Summer School GEFFA (Geometry Education for Future Architects), Rijeka, 2012

MEMBERSHIPS

Member of Croatian Society for Geometry and Graphics.

TEACHING EXPERIENCE

COURSES TAUGHT

- Descriptive geometry, undergraduate level
- Perspective, graduate level
- Basics of computer engineering, undergraduate level
- Mathematics I, undergraduate level
- Mathematics II, undergraduate level
- Algorithms and data structures, undergraduate level
- Differential geometry, postgraduate level

ADDITIONAL INFORMATION

COMPUTER SKILLS

- *MS Office*
- experience in programming; C, C++ and *Python*
- *Rhinoceros 3D* with *Grasshopper*

LANGUAGES

	speaking	writing	reading
English	C1	C1	C1
German	B1	A2	B1
Spanish	B1	A2	B2