

Short Curriculum Vitae - Miha Ravnik

(as of Jan 2020)

Miha Ravnik - age 38 - is Associate Professor at the Faculty of Mathematics and Physics, University of Ljubljana, Slovenia and Senior research associate at Josef Stefan institute. His expertise is in modeling and theory of soft matter systems, in particular liquid crystals, liquid crystal colloids, active fluids, effects of external fields, and optics and photonics of complex optically-anisotropic fluids. Ravnik defended his PhD in physics in 2009 in Ljubljana, Slovenia. From 2009-12, he worked as a post-doctoral Marie Curie Fellow at the Rudolf Peierls Centre for Theoretical Physics at the University of Oxford, UK. Also, he served as tutor for condensed matter physics at the University of Oxford. In 2013, he returned to Faculty of Mathematics and Physics, University of Ljubljana as tenure track assistant professor. In 2015, he obtained a permanent position at the Faculty of Mathematics and Physics, University of Ljubljana and was also awarded additional affiliation with the J. Stefan Institute. From 2018 he is the head of the Group for Physics of Soft and partially ordered matter (<https://softmatter.fmf.uni-lj.si/main.php?page=home>).

Personal: Born in Kranj, Slovenia, 1981. Married. 2 daughters and 1 son (2013, 2016, 2018).

Positions & employment:

- Associate professor, Faculty of Mathematics and Physics, UL, 2017-
- Senior research associate, Josef Stefan Institute, Ljubljana, 2017-
- Assistant professor (from 2015, with tenure), Faculty of Mathematics and Physics, UL, 2013-17
- Research associate, Josef Stefan Institute, Ljubljana, 2015-17
- Post-doctoral Research Fellow (Marie Curie Fellow), Rudolf Peierls Centre for Theoretical Physics, University of Oxford, 2009-12
- "Young researcher" (= PhD student), Faculty of Mathematics and Physics, UL, 2004-09

Education:

- 2004-2009 PhD in Physics, specialisation Condensed Matter Physics, Faculty of Mathematics and Physics, University of Ljubljana. PhD thesis: "Colloidal Structures Confined to Thin Nematic Layers", Advisor: S. Zumer.
- 2000-2004 MSc in Physics, Faculty of Mathematics and Physics, University of Ljubljana. Msc thesis: "Effect of a Light Beam on Colloidal Particles Dispersed in a Nematic Liquid Crystal", Advisor: S. Zumer. (5-year course in 4 years)

Selected highlights:

a) >75 scientific papers, including 2x Science, 1x Nature Materials, 1x Nature Photonics, 1x Nature Physics, 3x Nature Communications, 4x PNAS, 1x PRX, 1x Science Adv, and 7x PRL; for all see <http://miha.ravnik.si>.

b) Hirsch index =27, Total citations>3200 (after WoS); Hirsch index=29, Total citations>4300 (after Google Scholar)

c) >25 invited talks at international conference (including Gordon Conf 2011, 2015, 2019); >20 invited seminars (UCambridge, UOxford, MIT, MPI, UTokyo,...).

d) Co-author of 1 EU patent & 1 pending EU patent application.

e) Co-organiser (awarded grant) of Research programme on Mathematical desing of new materials at the Isaac Newton Insitute, Unviersity of Cambridge, Jan 2019 – Jun 2019; also awarded Simons fellowship for distinguished researchers.

f) Total amount of awarded grants as PI or coPI: >1.5MEUR; USAF EOARD, Slovenian Research Agency, Slovenian Ministry of Science and Education, EU, industry (Novartis, Lek);

g) Group (advisor): 4 PostDocs (J. Everts, awarded Marie Curie EU fellowship in 2018; Z. Kos, awarded EU MC IF Seal of Excellence grant to work on MIT, D. Sec & J. Aplinc industry projects), 4 PhD students (A. Bregar, U. Mur, M. Marincic, U. Markoja&M. Stimulak – part time), 2 Msc students; advisor for 2 completed PhDs)

h) Awards: National "Ziga Zois" recognition of important scientific achievements in soft matter physics (awarded by the Republic of Slovenia, 2019), EPJ Distinguished Referee 2016 (awarded by the European Physical Journal), EU IEF Marie Curie Fellowship (at University of Oxford with Prof. J. Yoemans, FRS, 2010-2012), International Glenn Brown Award for best PhD Thesis (awarded by the International Liquid Crystal Society, 2010), the Award for Best Junior University Professor (awarded by the University of Ljubljana, Dec 2014), the Golden Emblem Prize (awarded by the Josef Stefan Institute 2011), the Faculty Preseren's Award for Outstanding Diploma Work (University of Ljubljana, 2004), and the Slovenian national Zois Scholarship for gifted students (1996-2004).

i) Teaching: Selected recent courses include: [i] lectures in Electromagnetic fields at FMF Univeristy of Ljubljana (3rd year physics course, 2017-), lectures in Physics for chemical biomedicine (1st year course, 2018-19), [iii] Mathematical physics I (2011-2016), exercises for 2nd year physics students, Ljubljana, [iv] Tutorials for 3rd year Physics course: Condensed matter physics and photonics (2009/2010), University of Oxford, [v] Tutorials for 3rd year Physics course: Solid state physics (2010/2011), University of Oxford.

j) Referee: Ravnik served as referee for the following scientific journals: Science, Nature, PRX, PRL, Nature Comm, Science Adv, PNAS, Soft Matter, NJP, PRE and other.

Ravnik served as referee for: EU Horizon 2020 (MC, ERC), Swiss SNSF, Austrian FWF, French ANR, UK Leverhulme trust, Polish National Science Center, MNG Ministrstvo za nauke and other.

k) Conference organisation (seleceted): (i) Conference 10th Liquid Matter Conference (July 17-21st 2017, Ljubljana; cca 800 participnats), scientific secretary, (ii) Conference 6th Workshop on Liquid Crystals for Photonics (September 14-16th 2016, Ljubljana; cca 70 participants), vice-chair. (iii) Conference COST Workshop on Modelling of Flowing Matter (February 16-18th 2015, FMF UL, Ljubljana; cca 40 participants), chairman