

## Curriculum Vitae

### PERSONAL INFORMATION

<b>Name</b>	MILOŠEVIĆ, Milorad	<b>Name in publications</b>	M.V. Milošević or M.V. Milosevic
<b>Date of birth</b>	30 June 1977	<b>Researcher ID</b>	H-9393-2012
<b>Civil status</b>	Married, one child	<b>Web site</b>	<a href="http://www.impact-science.net">www.impact-science.net</a>
<b>Nationality</b>	Belgian		

### EDUCATION

Oct.1995-Sept.2000	<b>B.Sc.-M.Sc.</b> Faculty of Electrical Engineering, Department of Physical Electronics, University of Belgrade, Serbia <b>M.Sc. thesis:</b> <i>Quantum Wire Lasers</i> (advisor Prof. M. Srečković)
Sept.1996-July 2000	<b>Student / Research assistant</b> Faculty of Physical Chemistry, University of Belgrade, Serbia
Sept.2000-July 2004	<b>Ph.D.</b> Department of Physics, University of Antwerp, Belgium <b>Ph.D. thesis:</b> <i>Vortex Matter in Superconductor-Ferromagnet Heterosystems</i> (advisor Prof. F. Peeters)

### CURRENT POSITIONS

Oct. 2007-present      **Professor (Hoogleraar)**, Department of Physics, University of Antwerp, Belgium  
June 2014-present      **Guest Professor (by appointment)** at University of Notre Dame, USA

### PREVIOUS POSITIONS

<i>Aug.2004-Sept.2006</i>	<b>Postdoctoral Fellow</b> in Department of Physics, University of Antwerp
<i>June-July 2005</i>	<b>Visiting Scholar</b> at Federal University of Rio de Janeiro (UFRJ), Brazil
<i>March-April 2006; idem 2007</i>	<b>Visiting Scholar</b> at University of Notre Dame, Indiana, USA
<i>Oct. 2006-Sept. 2008</i>	<b>Marie-Curie Research Fellow</b> at University of Bath, Bath, UK
<i>Aug.-Sept. 2009,2010</i>	<b>Visiting Researcher</b> in Argonne National Laboratory, USA
<i>Dec. 2010-Feb. 2011; idem 2013; idem 2014</i>	<b>Visiting Professor</b> at Federal University of Pernambuco (UFPE), Brazil
<i>Dec. 2011-Nov. 2013</i>	<b>Visiting Professor</b> at Federal University of Ceará (UFC), Brazil
<i>Nov.-Dec. 2012; idem 2013; July 2016</i>	<b>Visiting Lecturer</b> at Université de Pierre et Marie Curie, Paris, France

### FELLOWSHIPS and AWARDS

*Sept.2000-July 2004*      **Dehousse scholarship** (at the University of Antwerp, Belgium)  
*Oct. 2006-Sept. 2008*      **Marie-Curie Individual Fellowship** (at University of Bath, Bath, UK)  
*Oct. 2007-present*      **Research Professorship**  
**Prize Frans Verbeure 2007** (Belgium)  
**Burgen Award of Academia Europaea 2010** (European)

### SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

Previously advised 15 PhD students:

**Golubjon Berdiyrov** (graduated in 2007, UA, co-advisor with Prof. F. Peeters); **Ben Xu** (2011, UA, now Assistant Professor at Tsinghua Univ. in China); **Roeland Geurts** (2011, UA); **Shi-Hsin Lin** (2012, UND, co-advisor with Prof. B. Janko); **Paulo Duarte Neto** (2012, UFRPE, Brazil, co-advisor with Prof. B. Stosic); **Lucia Komendova** (2013, UA); **Diego Frota** (2015, UFC, Brazil, co-advisor with Prof. W. Ferreira); **Natalia Orlova** (2016, UA); **Davi Dantas** (2017, UFC, Brazil, co-advisor with Prof. A. Chaves); **Victor Fernandez-Becerra** (2017, UA); **Željko Jelić** (2017, UA); **Jonas Bekaert** (2018, UA); **Rodolpho Ribeiro Gomes** (2018, UFRJ, Brazil, co-advisor with Prof. M. Doria); **Dusan Stosic** (2018, UFPE, Brazil, co-advisor with Prof. T. Ludemir); **Darko Stosic** (2018, UFPE, Brazil, co-advisor with Prof. T. Ludemir).

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### Supervised postdocs:

Golibjon Berdiyrov (2007-2012); Arkady Shanenko (2009-2012); Lucian Covaci (2011-2014); Vladimir Baranov (Oct. 2014-Sept. 2016); Lingfeng Zhang (Oct. 2015-present).

### Where are they now?

In academia	In institutes
Ben Xu Assistant Professor at Tsinghua Univ. in China	Golibjon Berdiyrov Research Leader Qatar Environment and Energy Research Institute
Shi-Hsin Lin Assistant Professor at Sun Yat-Sen Univ. in Taiwan	Roeland Geurts Researcher VITO (CleanTech Institute), Belgium
Paulo Duarte Neto Adjunct Professor at UFRPE, Brazil	Lucian Covaci Research Manager NANO CoE, Antwerp
Lucia Komendova Postdoc Uppsala, Sweden, on fellowship from Swedish Research Council	Dusan Stosic DevTec, NVIDIA
Diego Frota Adjunct Professor at UNIFOR, Brazil	Darko Stosic DevTec, NVIDIA
Davi Dantas Adjunct Professor at UNIFOR, Brazil	
Rodolpho Ribeiro Gomes Assistant Professor at UFRJ, Brazil	
Arkady Shanenko Professor at UFPE, Brazil	

### Currently supervising 8 doctorates:

Jeroen Mulkers (started 2014, UA); Belisa Rebeca de Aquino (2014, UA); Luca Flammia (2014, UniCam, Italy, co-advisor with Prof. A. Perali); Jesus David Gonzalez Acosta (2016, UNC, Colombia, co-advisor with Prof. J. Barba Ortega); Vagner Bessa (2016, UFC, Brazil, co-advisor with Prof. A. Chaves); Alfredo Vargas Paredes (2016, UniCam, Italy, co-advisor with Prof. A. Perali); Annelinde Strobbe (2017, UA); Rai Menezes (2017, UFPE, Brazil, co-advisor with Prof. C. C. da Silva).

TEACHING ACTIVITIES	INSTITUTIONAL RESPONSIBILITIES
<b>Bachelor level</b> Numerical methods; Quantum mechanics	<b>Coordinator</b> of the International master in Nano and Material Physics (NANOMAT) at UA.
<b>Master level</b> Physics of low-dimensional systems	<b>Erasmus coordinator</b> , Department of Physics, UA
Surface physics	<b>Member</b> of the InterFaculty Doctoral Council, UA
Computational physics	<b>Member</b> of Educational Board for Physics, UA
Internships	<b>Member</b> of Internationalization Council of the Faculty of Sciences, UA

### ORGANISATION OF SCIENTIFIC MEETINGS

**Member of the steering committee:** biannual *International Conference on Superconductivity and Magnetism* (over 1000 participants, in Turkey): ICSM 2010, 2012, 2014, 2016, 2018

**Organizer of international meetings:** conferences on *Multicomponent Superconductivity and Superfluidity*: MultiSuper 2012 (Lausanne, Switzerland), MultiSuper 2014 (Camerino, Italy), MultiSuper 2018 (ICTP, Trieste, Italy). Workshops: QVMS 2013 (Recife, Brazil) and SuperThin2017 (Lugano, Switzerland). Taken commitment to organize conference VORTEX2019 in Antwerp, Belgium.

### COMMISSIONS OF TRUST

**Referee** for Nature Physics, Nature Communications, Nano Letters, Nanotechnology, Scientific Reports, Physical Review Letters, Physical Review B and E, Applied Physics Letters, Journal of Applied Physics, Journal of Physics – Condensed Matter, Chinese Physics Letters, Physica C, Journal of Low Temperature Physics, and Solid State Communications. **Editorial board member** of *Scientific Reports* and *Condensed Matter*. **Guest Editor** in *Superconductor Science and Technology*, *New Journal of Physics*. **Expert evaluator** for ERC, Belgian Science Policy (BELSPO), DFG Germany, Israel Science Foundation, Romanian National Research Council, French National Research Agency, Austrian Science Fund, Polish Science Centre, and Chinese Academy of Sciences.

## Curriculum Vitae

### SUMMARIZED SCIENTIFIC-TECHNOLOGICAL EXPERTISE

**Theoretical nanophysics**, in close connection to experimental efforts in the field, in collaboration with over 20 experimental labs worldwide. **High-performance computations** for condensed matter physics problems (in the past applied to superconductivity, magnetism, metal-semiconductor and soft-hard matter hybrids), including efficient (multigrid) solvers for multiple coupled nonlinear differential equations, GPU accelerated parallel computations, multiscale techniques, calculations of structural, electronic, vibrational, and transport properties of soft-hard matter atomic heterostructures, using LAMMPS, Quantum Espresso, AbInit, VASP, TranSiesta, home-made anisotropic Eliashberg solver for electron-phonon coupling and superconductivity, and Bogoliubov-deGennes and Ginzburg-Landau solvers for (static and dynamic) characterization of nanostructured superconductors.

### BIBLIOGRAPHIC RECORD

#### Peer-reviewed publications

(Hirsch) *h*-index 30, 150 publications, 125 in high-profile journals in the past ten years (cited >3000 times, see graph for citations per year), out of which:

2 Nature Physics (IF 20.603)	1 Nature Communications (IF 11.417)	15 Phys. Rev. Lett. (IF 7.728)
6 Nature Sci. Rep. (IF 5.578)	3 New J. of Phys. (IF 3.671)	6 Appl. Phys. Lett. (IF 3.515)
54 Phys. Rev. B (IF 3.664)	4 Phys. Rev. A (IF 2.991)	2 Phys. Rev. E (IF 2.326)
4 Europhys. Lett. (IF 2.269)		

2 book chapters

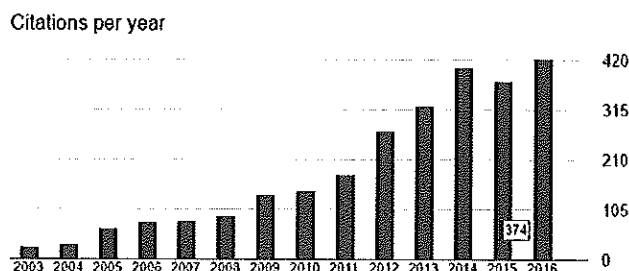
Edited 1 special issue of a journal

3 articles featured on the cover page of the journal

6 articles featured on popular science websites

**Complete publication list and tabular summary of publications is available at:**

<http://www.researcherid.com/rid/H-9393-2012>



### MAJOR COLLABORATIONS

Prof. Milosevic has published nearly all his papers in international collaboration, and holds a very unique position in theoretical modelling and simulations of superconductivity and magnetism, which is witnessed by very successful and lasting collaboration with experimental labs of:

**Prof. Simon Bending, Experimental Nanosciences group, University of Bath, UK**

**Prof. Victor Moshchalkov, Nanoscale Superconductivity and Magnetism, KULeuven, Belgium**

**Prof. Wai-Kwong Kwok, Materials Science Division, Argonne National lab, USA**

**Prof. Dimitri Roditchev, QuantumSpecs lab, INSP-UPMC-ESPCI, Paris, France**

**Prof. Eli Zeldov, Superconductivity Lab, Weizmann Institute, Israel**

### SELECTED INVITED TALKS

In the last ten years (out of 50 invited talks since 2002)

27/05-03/06/17	International Conference on Vortex Matter in Superconductors, Natal, Brazil	Multigap superconductivity in its 2D limit
24-28/10/2016	Latin American Conference on Superconductivity and Magnetism, Lima, Peru (plenary)	Vortex matter in superconductors, superfluids and magnetic materials: a smoking gun for emergent novel phenomena
14-17/09/2016	MACRO JQC conference, Newcastle, UK	Topological defects in multicomponent superfluids
04-07/09/2016	Nano confined superconductors and their application, Garmisch-Partenkirchen, Germany	Emergent phenomena in multiband superconductors: from first principles to macroscopic observables
24-30/04/2016	ICSM2016, Fethiye, Turkey	Stroboscopic dynamics in superconductors: fundamentals and applications
12-17/09/2015	Vortex matter in nanostructured superconductors, Rhodes, Greece	Magnetic properties of superconductors between standard types
12-18/06/2015	Superstripes 2015	Emergent phenomena in multiband superconductors
16-19/05/2015	Advances in Studies of Superconducting Hybrids: Theory and Modeling vs Experiment	Multiband hybridization in novel superconductors
10-15/05/2015	Vortex2015, El Escorial, Spain	Exotic vortex phenomenology in multiband superconductors

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01-04/09/2014	Physics and Applications of Superconducting Hybrid Nano-Engineered Devices (SHyNeD)	Josephson loops in nanostructured superconductors
24-27/06/2014	Multisuper2014 conference	Fractional flux vortices and interband Josephson strings in multiband superconductors
04-07/05/2014	Advances in nanostructured superconductors: materials, properties and theory, Madrid, Spain	Giant paramagnetic response in critical superconductors
26-30/04/2014	ICSM2014, Antalya, Turkey	Fluxonics In two-component superconductors
03-08/11/2013	National Physics Conference of Brazil (plenary)	Types of superconductivity – the extended classification
13-18/10/2013	Coherent Hybrid Structures on the Mesoscale, Evanston, USA	Critical superconductors
21-26/09/2013	Vortex VIII, Rhodes, Greece	Crossover superconductivity
21-26/05/2013	14th International Workshop on Vortex Matter In Superconductors, Nanjing, China	Novel flux phases in multiband superconductors
14-18/05/2012	ENFMC2012, Aguas de Lindoia, Brazil	Enhancement of superconductivity by magnetic nano-structuring
01-04/05/2012	ICSM2012, Istanbul, Turkey	Vortices in type-I superconductors
11-17/07/2011	SigmaPhi2011, Larnaca, Cyprus	Two-band superconductors In Ginzburg-Landau theory
03-07/05/2011	International Workshop on Mesoscopic Superconductivity & Vortex Imaging, Bath, UK	Detection and manipulation of multi-quanta vortices in superconductors: electronic, calorimetric and magnetic evidence
25-30/04/2010	ICSM2010, Antalya, Turkey	Vortex matter In two-band superconductors
20-28/09/2009	The ESF-NES Conference, Crete, Greece	Mesosopic type-I superconductivity
25-29/09/2008	ICSM2008, Side, Turkey	(Anti)fluxonics in superconducting hybrids
15-17/09/2007	MP3 conference, Beijing, China	Arrays of nanoholes for enhancing superconductivity: perspectives for quantum logic applications
03-08/09/2006	MesoSuperMag conference, Chicago, USA	Novel phenomena in three-dimensional superconducting hybrids