

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n. 1 posto di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera a) della Legge 240/2010 per il settore concorsuale 01/A4 - Fisica Matematica, settore scientifico-disciplinare MAT/07 - Fisica Matematica presso il Dipartimento di Matematica "FEDERICO ENRIQUES", (avviso bando pubblicato sulla G.U. n. 50 del 30/06/2020) Codice concorso 4390

Roman Belousov

CURRICULUM VITAE

INFORMAZIONI PERSONALI

COGNOME	BELOUSOV
NOME	ROMAN
DATA DI NASCITA	21 GENNAIO 1985

Esperienza di Lavoro**Da 2019**

Postdoc Fellow, Quantitative Life Sciences, International Centre for Theoretical physics (Trieste)

2017-2018

Postdoc Associate, Laboratory of Sensory Neuroscience, Howard Hughes Medical Institute & Rockefeller University

2014-2017

Postdoc Associate, Laboratory of Statistical Physics, Rockefeller University

(2015-2017)

Visiting Scholar, Department of Physics and Astronomy, University of Iowa

2013-2014

Senior Software Engineer, Industrial Cloud & Web Engineering Lab (<https://industrial-cloud.com>), Politecnico di Torino

2012-2013

Assegnista di Ricerca, Rarenoise project, INFN (sezione di Padova) & Politecnico di Torino

2006-2007

Part-time web programmer, LLC Serenity, St. Petersburg

2004-2007

Part-time engineer of 9th rank, programmer, Institute of Earth Sciences, St. Petersburg State University

Educazione

2012 - PhD, Science and High Technology (Earth Sciences), Università di Torino

2009 - Specialist Degree, Mathematics & Informatics, St. Petersburg State University

2008 - MSc (Double Degree), Materials Science, Université de Rennes 1 & Università di Torino

2006 - BSc, Geology (Crystal Chemistry), St. Petersburg State University

2002 - High School, Advanced Mathematics and Languages program, St. Petersburg Classical Gymnasium 610

Certificati

2018 - Principles of Economics, Online Course, Stanford University

2018 - Quantum Mechanics for Scientists and Engineers 2, Online Course, Stanford University

2018 - Quantum Computing, Online Certificate (Coursera), St. Petersburg State University

2018 - Computational Neuroscience, Online Certificate (Coursera), University of Washington

2017 - The Finite Element Method for Problems in Physics, Online Certificate (Coursera), University of Michigan

2006 - Business School, St. Petersburg State University

2001 - Music School, Class of Saxophone, St. Petersburg School of Rimsky-Korsakov

Esperienza di insegnamento

2019 - Lecturer, Mathematical Methods for Quantitative Life Sciences (<https://mm.belousov.tel>), International Centre for Theoretical Physics (Trieste)

2017 - Teaching Assistant, Introductory Physics I, University of Iowa

Premi e borse

2009-2011 - Borsa di Studio per la scuola di Dottorato, Università di Torino

2010 - Premio di Ernesto Fea, Università di Torino

2007-2008 - Erasmus Mundus Master Scholarship, European Commission

2007 - Borsa di Studio per il corso di lingua tedesca, German Academic Exchange Service (DAAD)

2006 - Support Grant for Young Scientists, St. Petersburg regional government (Russia)

2001 - Grant of European Summer School in Classical Civilization, Euroclassica

Conoscenza Lingue

Madrelingua Russa

Buona conoscenza di Inglese e Italiano

Conoscenza media di Tedesco [certificato

“Oberstufe I” di DAAD, University of Saarland (2007); certificato “Grundstufe III” di St. Petersburg State University (2006)]

Conoscenza di base di Spagnolo e Francese

Affiliazioni di Società Scientifiche

Da 2017 - Membro di American Physical Society (APS)

2018-2019 - Membro di European Physical Society (EPS)

PUBLICATIONS

[1]. **R. Belousov**, M.N. Qaisrani, A. Hassanali, É. Roldán. *First-passage fingerprints of water diffusion near glutamine surfaces*; Soft Matter, DOI: 10.1039/D0SM00541J, 2020.

[2]. **R. Belousov**, F. Berger, A.J. Hudspeth. *Volterra-series approach to stochastic nonlinear dynamics: linear response of the Van der Pol oscillator driven by white noise*; arXiv:1908.05313, 2019.

[3]. **R. Belousov**, F. Berger, A.J. Hudspeth. *Volterra-series approach to stochastic nonlinear dynamics: The Duffing oscillator driven by white noise*. Phys. Rev. E 99, 2019.

[4]. **R. Belousov**, A. Jacobo, A.J. Hudspeth. *Fluctuation theory in space and time: white noise in reaction-diffusion models of morphogenesis*; Phys. Rev. E 98, 2018.

[5]. Z. Haralson, J. Goree, **R. Belousov**. *Dusty plasma experiment to confirm an expression for the decay of autocorrelation functions*; Phys. Rev. E 98, 2018.

[6]. **R. Belousov**, E.G.D. Cohen, L. Rondoni. *Nonequilibrium Langevin dynamics: A demonstration study of shear flow fluctuations in a simple fluid*; Phys. Rev. E 96, 2017.

[7]. **R. Belousov**, E.G.D. Cohen. *Second-order fluctuation theory and time autocorrelation function for currents*; Phys. Rev. E 94, 2016.

[8]. **R. Belousov**, E.G.D. Cohen, L. Rondoni. *Langevin equation for systems with a preferred spatial direction*; Phys. Rev. E 94, 2016.

[9]. **R. Belousov**, E.G.D. Cohen, CS. Wong, J. Goree, Y Feng. *Skewness of steady-state current fluctuations in nonequilibrium systems*; Phys. Rev. E 93, 2016.

[10]. **R. Belousov**, P. de Gregorio, L. Rondoni, L. Conti. *Statistical distribution of bonding distances in a unidimensional solid*; Physica A 412, 2014.

[11]. P. Adamo, **R. Belousov**, L. Rondoni. *Fluctuation-dissipation and Fluctuation Relations From Equilibrium to Nonequilibrium and Back; Large Deviations in Physics*, Chapter 4, ed. Vulpiani et al., Springer, 2014.

[12]. I. Scanavino, **R. Belousov**, M. Prencipe. *Ab initio quantum-mechanical study of the effects of the inclusion of iron on thermoelastic and thermodynamic properties of periclase (MgO)*; Phys. Chem. Miner. 39, 2012.

[13]. **R. Belousov**, S.K. Filatov. *Algorithm for calculating the thermal expansion tensor and constructing the thermal expansion diagram for crystals*; Glass Phys. Chem. 33, 2007.

CONFERENCES

- [1]. **R. Belousov**, É. Roldán. *Higher-order memory and inertia effects in Onsager-Machlup theory of stochastic fluctuations*. Oral presentation in a topical meeting of Santa Marinella Research Institute, Santa Marinella (Italy) 5-8 June 2019.
- [2]. **R. Belousov**, Florian Berger, A. J. Hudspeth. *A Volterra-series approach to nonlinear dynamics of the Van der Pol and Duffing oscillators driven by white noise*. Oral presentation in a conference of the European Physical Society on Statistical Physics of Complex Systems, Stockholm (Sweden) 7-11 May 2019.
- [3]. **R. Belousov**, E.G.D. Cohen, C. Wong, J.A. Goree, Y. Feng, L. Rondoni. *Langevin dynamics and a skew probability distribution of nonequilibrium current fluctuations*. Poster presentation in 26th IUPAP International conference on Statistical Physics (STATPHYS 26), Lyon (France) 18-22 July 2016.
- [4]. **R. Belousov**, M. Prencipe. *Ab Initio Quantum Mechanical Calculation of Thermodynamical Properties of Magnesium Perovskite and Post-Perovskite at Extreme Conditions of Temperature and Pressure*. Poster presentation in 89th SIMP Meeting, Ferrara (Italy) 13-15 September 2010.
- [5]. M. Prencipe, **R. Belousov**, F. Nestola. *First Principles HF/DFT Calculations of Structure and Compressibility of an Al-Defective Spinel [Mg₂Al₃XO₈]*. Poster presentation in 1st SIMP-AIC Joint Meeting, Sestri Levante (Italy), 7-12 September 2008.
- [6]. **R.I. Belousov**, S.K. Filatov, B. Albert, R.S. Bubnova, R. Cordier. *The crystal structure of LiB₃O₅ at low temperatures*. Oral presentation in XVI International conference on Crystal Chemistry and Diffraction Studies of Minerals (CCDM), Russian Mineralogical Society, Miass (Russia), 2-6 July 2007.
- [7]. **R.I. Belousov**, S.K. Filatov. *The program of thermal expansion tensor parameters calculating for crystals of any symmetry*. Poster presentation in Topical meeting of the European ceramic society, Saint-Petersburg (Russia), 27-29 June 2006.
- [8]. S.K. Filatov, **R.I. Belousov**, J.E. Anderson, B.E. Burakov. *Thermal expansion of the solid of zircon and monazite types as perspective materials for nuclear waste burial*. Poster presentation in Topical meeting of the European ceramic society, Saint-Petersburg (Russia), 27-29 June 2006.

Data

14/07/2020

Luogo

Trieste