

# Curriculum Vitae - Magdalena Djordjevic

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### **Scientific Interests**

- Theoretical Nuclear and High Energy Physics. Relativistic Heavy Ion Collisions.
- Mathematical Biology. Modeling epidemic's spread and bacterial immune systems.

### **Education**

June 2005: PhD, Department of Physics, Columbia University, NY, USA.

Feb 2004: M. Phil. in Physics, Columbia University, NY, USA. May 2002: M. A. in Physics, Columbia University, NY, USA.

June 2000: Diploma in Physics, Belgrade University, Faculty of Physics, Serbia

**Positions** 

Dec 2016: Research Professor, Leader of the Relativistic Heavy Ion Group, Institute of Physics,

University of Belgrade, Serbia

Oct 2010 – Dec 2016: Research Associate Professor and Marie Currie Fellow (through FP7 MCIRG),

Institute of Physics, University of Belgrade, Serbia

Sept 2008 – Jun 2010: Assistant Professor of Physics, Arkansas State University, USA

Sept 2005 – Aug 2008: Postdoctoral Researcher, Department of Physics, Ohio State University, USA

Sept 2001 – Aug 2005: Research Assistant, Department of Physics, Columbia University, USA Theory group member, Department of Physics, Columbia University, USA

Sept 2000 – Sept 2001: Faculty fellow, Department of Physics, Columbia University, USA

Jun 1999 – Jun 2000: Diploma Thesis Research, Institute of Physics, University of Belgrade, Serbia

### **Awards**

Sept 2019: Member of the Young Academy of Europe (YAE), awarded by the Selection

Committee and the Board of YAE.

May 2016: "IPB 2016 Annual Research Prize", awarded by Institute of Physics Belgrade, U. of

Belgrade, Serbia.

April 2012: "L'Oréal-UNESCO For women in science award in Serbia", awarded by L'Oréal-

UNESCO Partnership, with support from the Ministry of Science of Serbia.

March 2011: "Marie Curie International Reintegration Grant" awarded by European Union

(Research Executive Agency), with a goal to support return to Europe "of top level

European researchers who have been working in other parts of the world".

May 2010: "Ralph E. Powe Jr. Faculty Enhancement Award" awarded by Oak Ridge Associated

Universities. The award is given to the best young faculty in the competition of 120

universities in the USA that are associated with Oak Ridge National Lab.

Jan 2008: "J. Robert Oppenheimer Fellowship" offered by Los Alamos National Laboratory

(declined). A description of the award is: "Candidates must display extraordinary ability in scientific research and show clear and definite promise of becoming

outstanding leaders in the research they pursue".

Apr 2007: "2007 Dissertation Award in Nuclear Physics" awarded by the American Physical

Society (APS). The award is given by APS for the best PhD thesis in nuclear physics

in competition of all North American Universities.

Oct 2004: The Best Poster Award, Physics of the Microworld, New York, NY, USA.

1995–2000: 'Department of Science' Fellowship (awarded five times), Serbia.

June 1995: Best students of generation award, Mathematical Gymnasium, Belgrade, Serbia.

## **Awarded grants**

• <u>Co-organizer:</u> Grant from National Advisory Committee for the Institute for Nuclear Theory for organization of the INT Program: "Heavy ion physics in the EIC era" at the University of Washington in Seattle, Washington from July 29 – August 23, 2024, USD 86000.

- <u>Principal Investigator</u>: Horizon2020 European Research Council (ERC) 2016 Consolidator Grant, ERC-2016-COG:725741, "A novel Quark-Gluon Plasma tomography tool: from jet quenching to exploring the extreme medium properties", from 2017-2023, EUR 1.356.000
- Work Package Coordinator: Science Fund of the Republic of Serbia, The Program IDEAS, 7750294, "Biophysics and Bioinformatics of CRISPR/Cas and Toxin-Antitoxin Regulation", from 2022-2025, EUR 198500.
- <u>IPB Coordinator</u>: Swiss National Science Foundation SCOPES project, IZ73Z0\_152297, "Bioinformatics and modeling of bacterial immune systems - understanding control of CRISPR/Cas", from 2014-2017, 193.500 CHF (75.000 CHF to IPB)
- <u>Scientist in charge</u>: FP7 Marie Curie International Reintegration grant, PIRG08-GA-2010-276913, "Theoretical predictions of jet observables in QCD matter", European Commission (Research Executive Agency), from 2011-2015, EUR 100.000

## **Academic supervision**

**Postdocs:** Dr. Bojana Ilic, 2019-, Dr. Bithika Karmakar, 2022 – 2023, Dr. Jussi Auvinen, 2017-2022 **PhD Students:** Dusan Zigic, 2018-2024, Stefan Stojku, 2019-2023, Andjela Rodic, 2015-2022, Bojana Ilic, 2013-2018, Jelena Guzina, 2013-2017

## **Major international collaborations**

- Sept 2019 2023: STRONG-2020 collaboration (http://www.strong-2020.eu/) H2020 (EU).
  Collaboration of physicists from leading European institutions to investigate the physics of strong interactions. M. Djordjevic represents heavy flavor energy loss.
- Dec 2019 Dec 2022: One Belt And One Road Science, Technology, and Innovation Action Plan, China. "Shanghai-Islamabad-Belgrade Joint Innovation Center on Antibacterial Resistance". M. Djordjevic is a senior team member, modeling bacterial immune systems.
- Feb 2016 2021: COST Action for Theory of Heavy Ion Physics (THOR). M. Djordjevic represents heavy flavor energy loss.
- Since 2012: Providing predictions for ALICE, ATLAS, and CMS experiments at LHC, and since 2004 for STAR and PHENIX experiments at RHIC.
- Sept 2013 Dec 2014: SaporeGravis collaboration on ultra-relativistic heavy ion collisions. M. Djordjevic represents heavy flavor energy loss.
- Jun 2012 2015: JET collaboration (jet.lbl.gov) DOE (USA) funded collaboration on theoretical jet physics. M. Djordjevic was an associate representing the opacity expansion approach.

#### **Editorial activities**

- Associate Editor, Frontiers in Physics, Frontiers Journals (IF 3.72).
- Editorial Board Member for *PMC Physics A* PhysMath Central, Springer (from 2007-2010)

• Referee for *Physical Review Letters*, *Physical Review C*, *Physical Review D* (American Physical Society), *Physical Letters B* (Elsevier), *Journal of Physics G* (Institute of Physics), *Nuclear Physics A* (Science Direct), *Universe* (MDPI), *Frontiers in Ecology and Evolution* (Frontiers), *Environment and Planning B: Urban Analytics and City Science* (Sage)

## **Conference and Workshop Organizations**

- July August 2024, Institute for Nuclear Theory Program: Heavy ion physics in the EIC era, with Ivan Vitev and Yang-Ting Chien, Seattle, USA
- May 2023, Workshop "Exploring Quark-Gluon Plasma through soft and hard probes", SANU, Belgrade, Serbia

# **Member of International Advisory Committees**

- Quark Matter (The XXX International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions) 2023, 2022, 2019 conferences.
- Hard Probes (11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions) 2022, 2020, 2018, 2016 conferences.
- EMMI rapid reaction task force (RRTF), July 2016, GSI Darmstadt, Germany.
- HEPFT2013 conference (XXIXth International Workshop on High Energy Physics), Russia.

# **Member of Program Committees**

- LHCP 2023 (The 11th annual conference on Large Hadron Collider Physics), Serbia.
- BPU11 Congress (The 11th Conference of the Balkan Physical Union), Serbia.

# **Reviewer of international projects**

- The Office of Nuclear Physics (NP), Department of Energy Office of Science, USA.
- Veni research proposals, Dutch Research Council.
- Research Proposals, National Science Centre Poland.
- Fondecyt National Projects Competition, National Research and Development Agency, Chile.
- Research Proposals, United Arab Emirates University (UAEU), UAE.

### **Publications**

Dr. Đorđević has published 77 scientific papers in international journals on the SCI list, being the first, single, or corresponding author on 52 of them (3 in Phys. Rev. Lett., 8 in Phys. Lett. B, and 18 in Phys. Rev. C), and the single author on 14 papers (1 in Phys. Rev. Lett., 1 in Phys. Lett. B, and 4 in Phys. Rev. C). On all Phys. Rev. Lett. papers, cited 288 times, she was the first or single author. The average impact factor of the journals in which her original scientific papers have been published is 4.4. She has also given 79 presentations (57 invited or plenary) at conferences and 24 seminars at universities and research centers.

Her publications have been cited approximately **3,500** times according to the SCOPUS database (~6,000 according to Google Scholar and ~4,400 according to SPIRES). According to the SCOPUS database, her h-index is **24**, and her i50-index (number of papers cited over 50 times) is **19**. Four of her papers have been cited over **250** times, another five over **100** times, and another ten over **50** times (she is the first, single, or corresponding author on 13 of these 19 papers). Based on a study by Stanford University, she is ranked among the top most cited scientists in the world. Her work on developing a dynamic heavy quark energy loss formalism was featured in APS Physics, a paper with her PhD student Bojana Ilić was highlighted in LabTalk, and her single-authored Phys. Rev. Lett. paper was highlighted in the "Summary talk" at the QM2015 conference. One of her papers in theoretical biology was featured on the cover of a journal, and her work with the first analytical solution for epidemic dynamics under strong control measures was published in the most prominent journal of nonlinear dynamics.