Hristina Delibašić-Marković, Ph.D.

▶ hristinadelibasic@gmail.com

https://orcid.org/0000-0002-8391-4179

in www.linkedin.com/in/hristina-delibasic-markovic



Employment History

2019 – present	Teaching Assistant and Research Associate in the Department of Physics, Fac- ulty of Science, University of Kragujevac, Serbia. Working on theoretical research in the field of atomic, molecular, and optical physics, with a focus on the interactions between lasers and plasma with surfaces. After completing a doctoral dissertation, I have continued to refine my skills in numerical modeling and simulation. Actively involved in guiding and supporting students in their understanding of physics and computational techniques. Regu- larly attend advanced training programs to enhance my research expertise.
2017 - 2019	Junior Teaching Assistant in the Department of Physics, Faculty of Science,

2017 – 2019 Junior Teaching Assistant in the Department of Physics, Faculty of Science, University of Kragujevac, Serbia. Managed laboratory exercises, guiding undergraduates through complex experimental tasks. Utilized numerical coding to enhance master's research and provided comprehensive support in the development of students' computational skills for their theses.

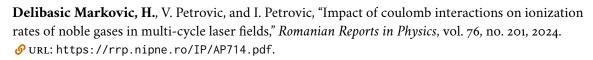
Education

2018 – 2023	R	Doctor of Philosophy (Ph.D.) in Physics. Specialization: Laser and plasma interaction with surfaces. Department: Atomic, molecular, and optical physics. University: <i>Faculty of Science, University of Kragujevac, Serbia.</i> Thesis title: <i>Theoretical-numerical method for determining the parameters of ionization and</i> <i>electron concentrations in processes of interaction of pulsed laser radiation with materials of</i> <i>biological origin.</i> Grades: 9.67/10.
2016 – 2018		Master of Science (M.Sc.) in Physics. University: Faculty of Science, University of Kragujevac, Serbia. Thesis title: Exploring the role of magnetic field effects in examining electron correlation during strong-field ionization. Grades: 9.40/10.
2012 – 2016		Bachelor of Science (B.Sc.) in Physics. University: Faculty of Science, University of Kragujevac, Serbia. Grades: 9.03/10.

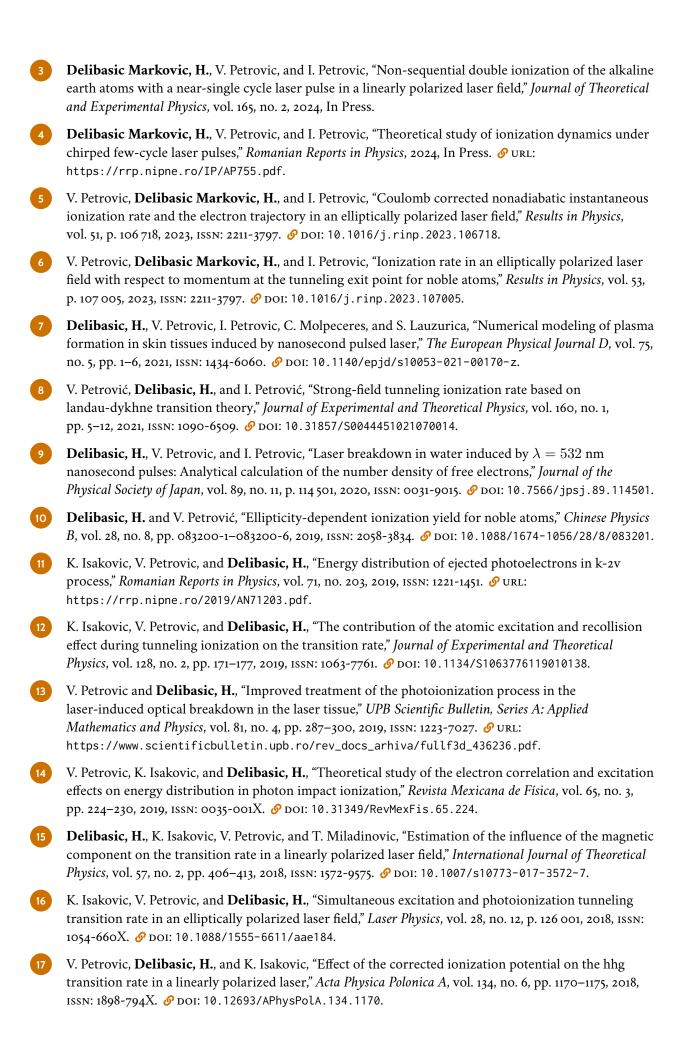
Research Publications

Journal Articles

Delibasic Markovic, H., K. Kaleris, N. A. Papadogiannis, and V. Petrovic, "Comparative analytical and numerical investigation of the plasma density in atmospheric air generated by nanosecond laser pulses," *Laser Physics Letters*, vol. 21, no. 3, pp. 1–10, 2024, ISSN: 1612-202X. *O* DOI: 10.1088/1612-202X/ad1cd9.



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Books and Chapters

V. Petrovic and **Delibasic Markovic, H.**, *Practicum with Collection of Exercises in Digital Electronics*. Kragujevac, Serbia: Faculty of Science and Mathematics, University of Kragujevac, 2021, Co-published with the Ministry of Education, Science, and Technological Development of the Republic of Serbia as part of the "Higher Education Development" program, Project Title: "Improvement of Teaching in Digital Electronics, Digital Signal Processing, Physics Teaching Methodology, and Informatics Teaching Methodology", ISBN: 978-86-6009-082-1.

Skills

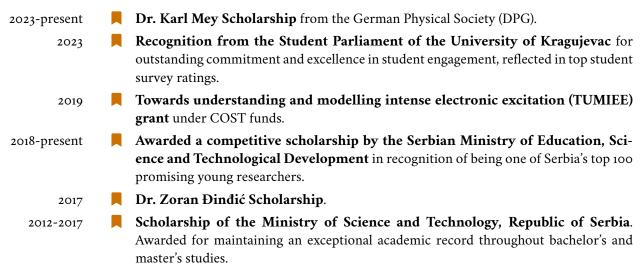
Languages	Serbian: Native, English: Full professional proficiency.
Programming & software	Wolfram Language, Python, 趵EX, Origin, Altium Designer, EAGLE, Corel- DRAW, and Microsoft Office.
Other	Experienced in academic research, teaching, and training. Skilled in devel- oping and delivering compelling PowerPoint presentations.

Research Projects

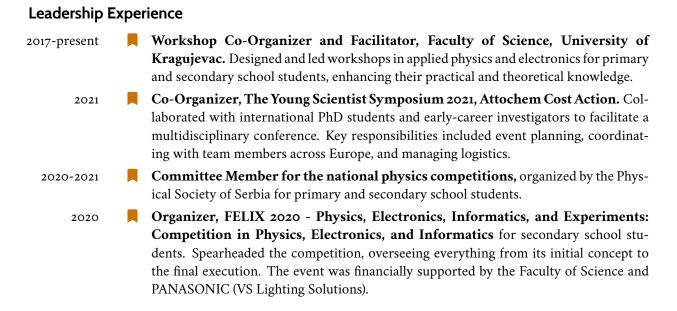
2024 – present	COST project CA21159, "Understanding interaction light - biological surfaces: possibility for new electronic materials and devices (PhoBioS)".
	COST project CA22148,"An international network for Non-linear Extreme Ultraviolet to hard X-ray techniques".
2023 – present	Science Fund of the Republic of Serbia, GRANT 6821, Atoms and (bio)molecules dy- namics and collisional processes on short time scale - ATMOLCOL.
2020 – 2024	COST project CA18222, "Attosecond Chemistry".
2019 - 2023	COST project CA17126, "Towards understanding and modelling intense electronic excitation".
2018 – 2019	RS-171020, "Physics of collisions and photo processes in atomic, (bio)molecular and nanosized systems".
2017	COST project CM1204, "XLIC – XUV/X-ray light and fast ions for ultrafast chemistry".

Miscellaneous Experience

Awards and Achievements



Miscellaneous Experience (continued)



Professional associations

2023-present 📕 Member of the German Physical Society.

Review Activities

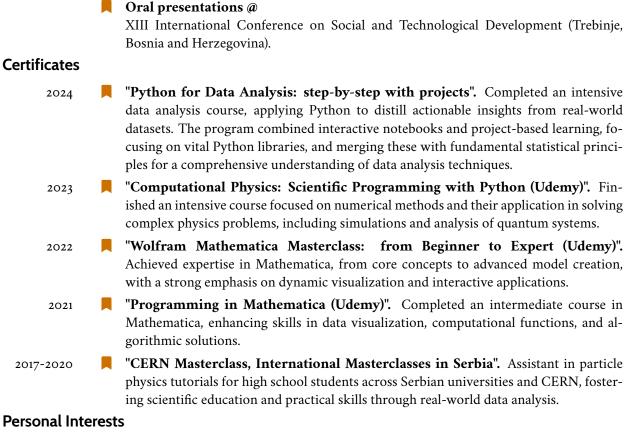
- Reviewer for Applied Physics B: Lasers and Optics (Impact Factor: 2.1).
- Reviewer for the AERA Open (Impact Factor: 2.8).
- Reviewer for the Optical Review (Impact Factor: 1.047).

Summer school, workshop & scientific communication

2022	"COST/ZCAM - School on New Computational Methods for Attosecond Molec- ular Processes ", flagship school held in Zaragoza, Spain.
	"30th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2022)", summer school held in Šabac, Serbia.
2019	"Training young researchers on multidisciplinary approaches to electronic ex- citation problems", training course held at Rethymno, Crete, Greece.
2017	"Computational Methods for Complex Molecular Systems", training course held at the Università degli Studi di Ferrara, Ferrara, Italy.
2017-present	Posters <i>@</i> DPG Spring Meeting of the Atomic, Molecular, Quantum Optics and Photonics Sec- tion (SAMOP) 2024 (Freiburg, Germany), 13th, 14th and 15th Conference of the Society of Physicists of Macedonia (CSPM) (Ohrid, North Macedonia), AttoChem Young Scientist Symposium 2023 (Vienna, Austria); III and IV Meeting on Astrophysical Spectroscopy (Fruška Gora, Serbia); VI, VII, and VIII International School and Conference on Pho- tonics (Belgrade, Serbia), X, XI, and XII International Conference on Social and Techno- logical Development (Trebinje, Bosnia and Herzegovina); National Seminar on Physics Education from the 14 th to the 20 th , organized by the Physical Society of Serbia (Serbia).
	Invited lectures @ 32nd Summer School and International Symposium on the Physics of Ionized Gases

32nd Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2024), Belgrade, Serbia.

Miscellaneous Experience (continued)



Enjoy reading, photography, traveling, yoga and dance, volunteering in community events, and visiting museums.

References

Available on Request.