



Rareș Iovănescu

Date of birth: [REDACTED] | Nationality: Romanian | Email address: iovanescu.rares@gmail.com

WORK EXPERIENCE

DOCTORAL RESEARCH ASSISTENT – ELI-NP - LASER DRIVEN EXPERIMENTS DEPARTMENT – 17/11/2021 – Current –
BUCHAREST-MĂGURELE, ROMANIA

EDUCATION AND TRAINING

2012 – 2016

HIGH-SCHOOL DIPLOMA Colegiul Național "Moise Nicoară" Arad

2016 – 2019 Bucharest, Romania

BACHELOR OF SCIENCE IN PHYSICS Universitatea din București

Field of study Physics | **Thesis** Ecuații bidimensionale pentru condensate Bose-Einstein puternic turtite

2019 – 2021 Bucharest, Romania

MASTER OF SCIENCE IN THEORETICAL AND COMPUTATIONAL PHYSICS Universitatea din București

Thesis Bubble formation in laser-plasma interactions by means of Particle-in-Cell simulations

2021 – CURRENT

PHD STUDENT IN PHYSICS Universitatea Națională de Știință și Tehnologie Politehnica București

Address Școala Doctorală de Ingineria și Aplicațiile Laserilor și Acceleratorilor SDIALA

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

LaTeX | Epoch | Wolfram Mathematica

PUBLICATIONS

2021

CONVECTIVE FLOW OF NANOFLUID ROUND PLUMES IN THE PRESENCE OF MAGNETIC FIELD

Authors: Cristian V. Vraciu, Rareș Iovănescu | **Journal Name:** Romanian Journal of Physics | **Volume, Issue and Pages:** 66, p.111

2023

OPTIMISATION OF PARTICLE-IN-CELL SIMULATIONS FOR LASER WAKEFIELD ACCELERATION

Authors: Rareș Iovănescu, Radu P. Daia, Emil I. Slușanschi, Cătălin M. Ticoș | **Journal Name:** UPB SCI. BULL. A | **Volume, Issue and Pages:** 85, pp. 159–166

2024
Electron dynamics in a relativistic central field approach associated with laser acceleration of electrons

Authors: Rareș Iovănescu, Radu P. Daia, Emil I. Slușanschi, Cătălin M. Ticoș | **Journal Name:** Romanian Journal of Physics | **Volume, Issue and Pages:** 69, p. 501

2025
Electron Filament Structures of Injected Electrons in LWFA

Authors: Rareș Iovănescu, Radu P. Daia, Emil I. Slușanschi, Cătălin M. Ticoș | **Journal Name:** IEEE Transactions on Plasma Science | **Volume, Issue and Pages:** 53.4, pp. 780–787

2025
Laser Self-Focusing in Plasma with a Vlasov Model

Authors: Rareș Iovănescu | **Journal Name:** Accepted for publication in Romanian Journal of Physics

● **DRIVING LICENCE**

Driving Licence: B

● **CONFERENCES AND SEMINARS**

05/2017 Facultatea de Fizică București
Sesiunea Științifică Anuală

2019
TIM 19 Physics Conference

Poster- **Effective equation for highly oblate Bose-Einstein condensates**

05/03/2017 Colegiul Național de informatică "Tudor Vianu", București
Concursul Romanian Master of Physics 2017 ediția a 6-a

Participare în calitate de membru al Comitetului de Evaluare

28/10/2017 Colegiul Național de informatică "Tudor Vianu", București
Concursul Romanian Master of Physics 2017 ediția a 7-a

Participare în calitate de membru al Comitetului de Evaluare

06/2024
The International Conference on Laser, Plasma and Radiation – Science and Technology (ICLPR-ST)

Oral presentation-"Betatron oscillations in LWFA with periodic plasma density profile"

06/2023
20th International Conference on Plasma Physics and Applications

Oral presentation-"Electron oscillations and filamentation in LWFA"

04/2023 Greece
5th European Conference on Plasma Diagnostics

Poster presentation-"On the injection, wave breaking and filamentation of electrons in LWFA"

07/2022
14th European Conference on Accelerators in Applied Research and Technology - ECAART14

Poster presentation-"Optimization of PIC simulations for LWFA"

06/2022
International Conference on Laser, Plasma, and Radiation - Science and Technology (ICPLR-ST)

Poster presentation-"Optimization of PIC simulations for LWFA"

● **HONOURS AND AWARDS**

07/04/2017

Concursul Național Studențesc "Dragomir Hurmuzescu" – Universitatea "Alexandru Ioan Cuza" din Iași

Premiul I