

## Andi Sebastian Cucoanes

Extreme Light Infrastructure-Nuclear Physics (ELI-NP),  
'Horia Hulubei' National R&D Institute for Physics and  
Nuclear Engineering (IFIN-HH)

✉ [andi.cucoanes@eli-np.ro](mailto:andi.cucoanes@eli-np.ro)

### WORK EXPERIENCE

- 2015 - present**    **Research scientist (CS3)**  
**Extreme Light Infrastructure-Nuclear Physics (ELI-NP), 'Horia Hulubei' National R&D Institute for Physics and Nuclear Engineering (IFIN-HH)**, Magurele, 30 Reactorului str. 077125, Romania
- Nuclear based techniques for the investigation of the laser intreractions, R&D for detectors used in laser-plasma experiments
  - Applications of high power lasers in biology and medicine
- [Business or sector](#) Research and applications based on high power lasers
- 2011 - 2014**    **Research scientist CNRS (CDD)**  
**Laboratoire SUBATECH, Group of Experimental Research on Data Reactors and Energy (ERDRE)**, Nantes, France
- Responsible for data analysis of nuclear physics experiments (Double Chooz, Nucifer, SoLid), involved in the R&D of detectors for nuclear and particle physics research
  - Co-adviser (with Prof. M. Fallot) of 3 undergraduate students for internships on data analysis of neutrino experiments
  - Assistant Professor of courses "Du capteur a l'instrument" and "Project d'investigation et d'integration" at École des Mines de Nantes (Prof. C. Rauch)
- [Business or sector](#) Research in nuclear and particle physics
- 2009 - 2011**    **PostDoc**  
**Commissariat a l'energie atomique et aux energies alternatives (CEA)**, Saclay, France
- Involved in the data analysis and detector R&D of nuclear physics experiments (Double Chooz, Nucifer)
  - Co-adviser (with Prof. D. Lhuillier) of 1 undergraduate students for internship on data analysis of neutrino experiments
- [Business or sector](#) Research in nuclear and particle physics
- 2006 - 2009**    **PhD**  
**Rheinisch-Westfalische Technische Hochschule (RWTH), III Physikalisches Institut**, Aachen, Germany
- The development of the trigger system of the Double Chooz experiment, involved in R&D and data analysis of the Double Chooz experiment
  - Assistant Professor at Nuclear Physics Laboratory of RWTH Aachen (Prof. O. Pooth)
- [Business or sector](#) Education and research in nuclear and particle physics
- 2002 - 2006**    **Research Assistant**  
**National Institute for R&D in Physics and Nuclear Engineering**, Magurele, Romania
- Involved in the development and R&D tests of the accelerator mass spectrometer facility
  - Involved in the R&D of particle physics experiments (CMS at CERN) at Istituto Nazionale di Fisica Nucleare (INFN) Pisa, Italy
- [Business or sector](#) Research in atomic physics and particle physics

**EDUCATION AND TRAINING**

- 2006-2009 PhD in physics**  
**Rheinisch-Westfälische Technische Hochschule (RWTH), Aachen, Germany**  
 ■ Research in particle physics, data analysis, instrumentation development
- 2002-2004 Master in physics**  
**University of Bucharest**  
 ■ Majors: Instrumentation in physics research, nuclear physics
- 1998-2002 Bachelor in physics**  
**University of Bucharest**  
 ■ Majors: Nuclear physics, instrumentation, optics

**PERSONAL SKILLS**

**Mother tongue(s)** Romanian

**Other language(s)**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
	Replace with name of language certificate. Enter level if known.				
French	C2	C2	C2	C2	B2
	Replace with name of language certificate. Enter level if known.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

**Communication skills** ■ Excellent communication skills gained through living experience in different countries in Europe: France, Germany, Italy, Holland

**Organisational / managerial skills** ■ Coordinator of the ELI-NP team in the framework of the project ELI-RO 24 TEDILAPLACE focussed on plasma diagnostic in laser-matter interactions.

**Job-related skills** Excellent knowledge of data analysis tools for physics research, C/C++ programming

**Digital competence**

	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem solving
	Proficient	Proficient	Proficient	Proficient	Proficient

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

**Driving licence** Yes

**ADDITIONAL INFORMATION**

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<b>Publications</b>	2019 Level 2 Radioprotection Certificate emitted by CNCAN
<b>Presentations</b>	
<b>Projects</b>	2014 Prize: "Best e-Poster advertisement in the session Technology Foresight and Emerging Technologies II" at IAEA Safeguards Symposium, Vienna (2014)
<b>Conferences</b>	
<b>Seminars</b>	
<b>Honours and awards</b>	2013 Passed the "Qualification aux fonctions de Maitre de conference" given by Conseil national des universités, France
<b>Memberships</b>	
<b>References</b>	2006 – 2009 PhD fellowship at Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen, Germany
<b>Citations</b>	
<b>Courses</b>	
<b>Certifications</b>	2004 – 2005 Fellowship at Istituto Nazionale di Fisica Nucleare (INFN) Pisa, Italy
	2003 Erasmus scholarship at Rijksuniversiteit (RUG) Groningen, Holland
	Former member of the Double Chooz, Nucifer, IGISOL, SoLid, and CMS Collaborations