

CURRICULUM VITAE

Mihnea Alexandru DULEA

Year, place of birth: 1958, Bucharest, Romania

Citizenship: Romanian

Education

Institution	Theoretical Highschool no. 24 Bucharest	Bucharest University Faculty of Physics	Bucharest University Faculty of Physics
Period: from - to	Sept.1973-June 1977	Sept.1978-June 1982	Sept.1982-June 1983
Degrees / diplomas awarded:	High school graduation diploma	Graduation diploma, solid state physics	MSc, specialization: polymer physics

Scientific title: PhD, theoretical physics, awarded by Linköping University, Sweden (Linköping Studies in Science and Technology, Dissertations, No.269, ISBN 91-7870-869-9, 1992)

Professional experience:

Period: from - to	10.1983- 09.1984	10.1984 - 08.2000	06.1993-06.1995	08.2000- 06.2001	07.2001- 05.2005	05.2005 – present
Place	Pitești	Măgurele	Linköping, Sweden	Bucharest	Bucharest	Măgurele
Institution	Institute of Nuclear Energetic Reactors (IRNE)	Institute of Physics and Technology of Materials	Linköping University, Inst. for Physics & Measurement Technology	Network TwentyOne Romania	Personal Development Systems International srl	National Institute for Physics and Nuclear Engineering "Horia Hulubei" (IFIN-HH)
Position	Physicist	Research assistant. Researcher. Senior Researcher.	Postdoc stage	IT&C Coordinator European Division	IT Manager	Senior researcher Head of IT group. Head of DPETI. Head of DFCTI.
Description	Numerical simulations for nuclear energetic reactors	Theoretical and computational Physics	Theoretical and computational Physics	Manager IT&C Database / web development	Manager IT&C Database / web development	IT management Coordination of RO- LCG. Grid & HPC technologies, parallel computing

Current position:

- Senior researcher, first degree.
- Head of Computational Physics and Information Theory Department (DFCTI), IFIN-HH

Professional affiliation: European Physical Society, Biophysical Society

Foreign languages: English, French

Other qualifications:

- Relational Databases, Open University (2001)
- 1999 ICTP Trieste Training Activity on Networking and Radiocommunications (1999)

Research activity

- Electron localization and transport properties in low-dimensional aperiodic systems
- Optical transmission and X-ray diffraction spectra of deterministic aperiodic multilayers
- Long-time asymptotics of biased diffusion in media with random distribution of traps
- Computer simulation studies for resonant tunneling semiconductor devices
- Grid and high-performance computing technologies

Coordinator of the Computational Biology group of IFIN-HH, since 2011. 23 peer-reviewed publications, 308 WoS citations, h-index 9 (<http://dfcti.ifin.ro/docs/MiD-publications.pdf>).

IT competences and activity

Coordinator of the development of Grid systems in DFCTI/IFIN-HH and of the *Romanian Tier-2 Federation* (RO-LCG, <http://lcg.nipne.ro>) - consortium that represents the Romanian contribution to the *Worldwide LHC Computing Grid* (WLCG) collaboration, since 2005. Founder and

coordinator of the development of the HPC infrastructure in IFIN-HH, since 2006. Founder and coordinator of GrINFiC - the *National Grid for Research in Physics and Related Areas*, since 2008. Networking; Grid computing and technology; parallel computing; database design & development (RDBMS); web development; programming (C, Fortran); datacenter infrastructure and management.

Participation in R&D projects

Program / Project	Position	Period:
Hulubei-Meshcheryakov / <i>Development of methods, algorithms and software computationally adapted to existing system hardware at LIT-JINR and Magurele Campus (32, 05-6-1119-2014/2016)</i>	Coordinator of IFIN-HH team	2014 - 2016
Hulubei-Meshcheryakov / <i>Definition and implementation of new functional features (monitoring, cloud services, etc.) of the distributed and parallel computing facilities at LIT-JINR and Magurele Campus (33, 05-6-1048-2014/2016)</i>	Coordinator of IFIN-HH team	2014 - 2016
PN2-Partnerships / AMPLE: <i>Activity modeling and simulation of bacterial efflux pump inhibitors based on advanced laser methods</i>	Responsible of IFIN-HH participation	2012 - 2015
PN2-Capacities-M3 CERN / CONDEGRID: <i>National contribution to the development of the LCG computing grid for elementary particle physics (08EU/2012)</i>	Project Leader	2012 - 2014
IFA-CEA partnership CD / HaPPSDaG: <i>Efficient Handling and Processing of PetaByte-Scale Data for the Grid Centers within the FR Cloud (C1-06/2010)</i>	Project Leader	2010 - 2012
FP7 / HP-SEE: <i>High-Performance Computing Infrastructure for South East Europe's Research Communities (FP7-RI-261499)</i>	Team Leader of Romanian JRU	2010 - 2013
Hulubei-Meshcheryakov / <i>Modeling and Developing Parallel Algorithms for the Study of complex Physical Systems at LIT-JINR and Magurele Campus, 05-6-1060-2005/2010</i>	Coordinator of IFIN-HH team	2010 - 2013
Hulubei-Meshcheryakov / <i>Optimization Investigations of the Grid and Parallel Computing Facilities at LIT-JINR and Magurele Campus, 05-6-1048-2003/2010</i>	Coordinator of IFIN-HH team	2010 - 2013
PN2-Capacities-M3 CERN / CONDEGRID: <i>National contribution to the development of the LCG computing grid for elementary particle physics (12EU/2009)</i>	Project Leader	2009 - 2011
NUCLEU / PN09370104: <i>Development of the Grid and HPC infrastructure for the physics of complex systems</i>	Project Leader	2009 - 2014
SOPIEC-A2-O2.2.3-2008-3 (structural funds) 209 / GRICEFCO: <i>Grid system for physics research and related areas</i>	Project Leader	2009 - 2011
SOPIEC-A2 IMPACT (structural funds) 1146 / CECSPAD: <i>Center for parallel and distributed scientific computing</i>	Project Leader	2007
PN2-Partnerships / SIMPROC: <i>Integrated informatic system for the real-time management of research projects (D11-043 / 2007)</i>	Project Leader	2007 - 2010
CORINT NUCINT / SINDEGRID: <i>National development and exploitation of the LCG computing grid for elementary particle physics (11/2006)</i>	Project Leader	2006 - 2008
CORINT NUCINT / SIMFAP: <i>Performant informatic system for the investigation of the physical models which are treatable by parallel algorithms (7/2006)</i>	Project Leader	2006 - 2008
NUCLEU / PN06350102: <i>Modernization of data communication infrastructure and implementation of Grid technologies</i>	Project Leader	2006 - 2008
CEEX / COMCIP: <i>The study of the complex physical phenomena by means of high performance distributed computing (CEX05-D11-67)</i>	Technical Resp.	2005 - 2008

Other specifications: President and co-founder of the *Romanian Association for the Promotion of Advanced Computing Methods in Scientific Research - ARCAS* (<http://www.arcas.org.ro>). Representative of Romania in WLCG's *Collaboration Board* and *Grid Deployment Board*.

Date

December 2013

Mihnea DULEA