

Curriculum vitae Sandra Dulla

Sandra Dulla

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Education and work experiences

October 2001: Master Degree in Nuclear Engineering at Politecnico di Torino, Italy

August 2001: “Frédéric Joliot – Otto Hahn Summer School in Reactor Physics”, Karlsruhe.

March 2005: PhD degree in Energetics at Politecnico di Torino, title of PhD thesis: “Models and methods in the neutronics of fluid fuel reactors”.

2005 - 2007: Post-doc research activities at Politecnico di Torino

June 2007 – October 2014: Assistant professor in Nuclear Reactor Physics at PoliTO

October 2104 – May 2020: Associate professor in Nuclear Reactor Physics at PoliTO

May 2020 – present: Full professor in Nuclear Reactor Physics at PoliTO

Participation to international research programs

- Fifth EU Framework Programme: **MUSE Program** and **MOST Project**
- Sixth EU Framework Programme: **ECATS** (part of EUROTRANS) and **ALISIA**
- Seventh EU Framework Programme: **EVOL** (PI for PoliTO)
- H2020 Programme: **SAMOFAR** (PI for PoliTO), **SAMOSAFER** (PI for PoliTO), **PASCAL**, **GREAT PIONEER** (PI for PoliTO)
- European projects in the field of education and training in the nuclear field (**ASIA LINK**, **TRASNUSAFE**, **ECNET**, **ENEN-RU**, **ENEN-RU II**)
- **IAEA Coordinated Research Projects** (CRPs) and **Collaborative activities**: “Studies of Innovative Reactor Technology Options for Effective Incineration of Radioactive Waste”, “Analytical and Experimental Benchmarks Analyses of Accelerator-Driven Systems (ADS)”, “LEU Fuel Utilization in ADS System”, “Benchmark Analysis of EBR-II Shutdown Heat Removal Tests”, “Accelerator-Driven System (ADS) Applications and Use of Low-Enriched Uranium in ADSs”.

Teaching experiences

- Monte Carlo Methods
- Nuclear reactor Physics and Transport Theory
- Biomedical and industrial applications of radiation
- Elements on Nuclear Engineering

Scientific activities

- Subcritical source-driven system: neutronics and core dynamics
- Liquid-metal-cooled fast reactors: multiphysics analyses, safety assessments and support to design

- Molten Salt reactors: neutronics, multiphysics, risk assessments
- Fusion systems: neutronic analysis and modelling for tritium breeding
- Neutron transport: development of models and methods, physico-mathematical analysis
- NPP decommissioning: transport/activation modelling in support to decommissioning activities

Publications

- Over 70 international peer-reviewed journal publications
- 3 book chapters
- Over 110 papers at international conferences in the fields of reactor physics and simulation

Torino, 13 September 2021

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