



## Matteo Spada

### PSAM12 Speaker Bio

#### **Comparative Assessment of Severe Accidents Risk in the Energy Sector: Uncertainty Estimation Using a Combination of Weighting Tree and Bayesian Hierarchical Models**

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**Short Statement:** First author

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#### **BIOGRAPHY**

Matteo studied physics at the University of Bologna (Italy). He received his master in July 2005. Between mid 2005 and mid 2006 he worked at the Istituto Nazionale di Geofisica e Vulcanologia (INGV), Rome as researcher in the topic of the crustal imaging. In November 2006 he started his PhD at the Swiss Seismological Service (SED), ETH Zurich, under the supervision of Prof. Stefan Wiemer and Prof. Edi Kissling. In his PhD thesis he worked in the context of a cross-disciplinary project on improving the ability to conduct tsunami and seismic hazard studies and to perform seismic imaging. Matteo completed his PhD in August 2011, and worked since then as a Post Doctoral researcher at SED on the same topics as in his thesis. He left the SED at the end October 2012.



Since January 2013, Matteo joined the Technology Assessment (TA) group of the Laboratory for Energy Systems Analysis (LEA) at the Paul Scherrer Institut (PSI) as a risk analyst. His primary research interests are the comparative analysis of severe accident risk in the energy sector, and its relevance in the broader context of sustainability, energy security, critical infrastructure protection, and decision support; the risk of rare but severe accidents related to production and consumption of energy; the uncertainty estimation in the context of accident risk assessment. Other interests include spatio-temporal models for accident risk assessment; the support of decision-making processes with tools such as Multi-Criteria Decision Analysis (MCDA). Matteo is also one of the responsible for the update and extensions of PSI's database ENSAD (Energy-Related Severe Accident Database), which is the world's largest database on severe accidents in the energy sector, providing a well-founded basis for technical comparisons of severe accident risks among different energy chains, and individual countries or country groups.

Matteo is regularly presenting his work at international conferences and meetings, publishing in peer-reviewed scientific journals and various other publications. Additionally, he is acting as a reviewer for numerous international, peer-reviewed journals. As part of his duties, he is also engaged in the supervision of students at different levels (PhD, MSc, BSc, interns).