



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Catastrophe Modelling

Laurent Marescot – RMS Zurich

Maurizio Savina – RMS Zurich

Cecilia Bittoni

June 21st, 2019, 10:00-13:00, Aula Magna

School of Engineering and Architecture

Alma Mater Studiorum, University of Bologna

How CAT modelling improves resilience to natural catastrophe risk

In Italy there is a clear lack of preparedness against natural catastrophes. For example, there is no national body coordinating flood risk prevention and mitigation. As consequence, the local basin authorities (Autorità di Bacino) are not coordinated with each other.

The government has allocated a budget for risk prevention but how and where it will be spent remains very vague due to lack of a unified vision.

Our goal of is to make practitioners more aware of the risk of natural disasters and demonstrate how the use of natural catastrophe risk models based on historical data and advanced scientific research allows to plan and implement targeted prevention measures both in terms of physical protection (physical resilience) and insurance coverage (financial resilience).



Main agenda

- **Introduction to Natural Catastrophe Risk**
- **How do we quantify the risk: probabilistic loss analysis**
 - **Why CAT models**
 - **Development and use of CAT models**
- **Resilience: Physical and Financial**
 - **Role of Private Markets: Insurance and Financial**
 - **Regulators, Capital requirements**
 - **The role of RMS**
 - **Natural CAT risk in Italy**
- **Financial resilience in other developed countries**



Speakers

Dr. Laurent Marescot, Senior Director, Model Product Management RMS

Laurent joined RMS in 2008 and now he is heading the Model Product Management group for all EMEA weather/climatic perils as well as RMS global agricultural solution. Laurent is a trusted advisor for the insurance industry and interacts with all main regulatory authorities as a model expert. Prior to RMS, Laurent worked 3 years at the ETH Zurich as a Research Associate and Lecturer and still lectures in various universities. Laurent holds a PhD in Geophysics from the University of Lausanne and the University of Nantes.

Dr. Maurizio Savina | Director, Model Product Management

Maurizio joined RMS in 2012 and he manages several Flood models in Europe, Asia and Latin America. Maurizio primary focus is to translate market needs into modelling initiatives and through this work he provides insights into risk modelling to optimize industry understanding of model results. Prior to RMS, Maurizio conducted postdoctoral research for the Chair of Hydrology and Water Resources Management at the ETH Zurich. Maurizio holds an MSc in Civil Engineering from the Polytechnic University of Turin and a PhD in Hydrology from the ETH Zurich.

Cecilia Bittoni

Over six years experience in Silicon Valley, USA and London, UK in Catastrophe Modelling for International Reinsurance and Insurance markets for RMS. Worked on risk transfer to the financial market through securitization and alternative risk transfer transaction (CAT Bond).

Cecilia holds a Laurea in Economia e Commercio, Università degli Studi di Bologna and a M.S. in Economics Bocconi University, Research Student, Department of Economics, Stanford University.





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