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Accelerating Global Science on Tsunami Hazard and Risk Analysis (AGITHAR)

Joern Behrens¹, Inigo Aniel-Quiroga², Sebastiano D'Amico³, Frederic Dias⁴, Ira Didenkulova⁵, Serge Guillas⁶, Stefano Lorito⁷, Finn Lovholt⁸, Jorge Macias⁹, Shane Murphy¹⁰, Ocal Necmioglu¹¹, Rachid Omira¹², Simone Roedder¹³, and Mathilde Sorensen¹⁴

Recent tsunami disasters revealed severe gaps between the anticipated level of hazard and the true extent of the event, with resulting loss of life and property. The severe consequences were underestimated in part due to the lack of rigorous and accepted hazard analysis methods and large uncertainty in forecasting the tsunami source mechanism and strength. Uncertainty and underestimation of the hazard and risk resulted in insufficient preparedness measures. While there is no absolute protection against disasters of the scale of mega tsunamis, a more accurate analysis of the potential risk can help to minimize losses from tsunami.

After the major events in 2004 and 2011 many new initiatives originated novel methods for tsunami hazard and risk analysis. However, rigorous performance assessment and evaluation – with respect to guiding principles in tsunami hazard and risk analysis – has not been conducted. In particular, comprehensive uncertainty assessments and related standards are required in order to implement more robust and reliable hazard analysis strategies and, ultimately, better mitigate tsunami impact. This is the core challenge of the proposed COST Action Accelerating Global science In Tsunami HAzard and Risk analysis (AGITHAR).

In our presentation we will demonstrate first results of the Action, assessing research gaps, open questions, and a very coarse roadmap for future research.

¹Dept. Mathematik, Universität Hamburg, Hamburg, Germany (joern.behrens@uni-hamburg.de)

²Instituto de Hidráulica Ambiental, Universidad de Cantrabria, Santander, Spain

³University of Malta, Malta

⁴School of Math. Sciences, University College Dublin, Dublin, Ireland

⁵Tallinn University of Technology, Tallinn, Estonia

⁶University College London, London, U.K.

⁷Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy

⁸NGI, Oslo, Norway

⁹Departamento de Análisis Matemático, Universidad de Málaga, Malaga, Spain

¹⁰Ifremer, Brest, France

¹¹Kandilli Observatory and Earthquake Research Institute, Boğaziçi University, Istanbul, Turkey

¹²Instituto Dom Luiz, University of Lisbon, Lisbon, Portugal

¹³Dept. of Social Sciences, Universität Hamburg, Hamburg, Germany

¹⁴University of Bergen, Bergen, Norway