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

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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 tsunamis.

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.

