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## Assessing research gaps in probabilistic tsunami hazard and risk analysis

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Probabilistic tsunami hazard and risk analysis (PTHA/PTRA) is an emerging scientific discipline within the tsunami community and allows potentially to incorporate the diverse sources of uncertainty into disaster prevention, preparedness, and mitigation activities. While there are a number of successful applications of this paradigm, it is still an emerging field with a number of unresolved research questions.

In a collaborative effort members of the COST Action AGITHAR assessed the existing research gaps for PTHA/PTRA and identified almost 50 different topics worth of further research. An ad hoc expert judgement was conducted to weight these open questions with respect to their expected impact on the quality of the PTHA/PTRA results and their difficulty to be answered. The results of this collaborative effort will be reported highlighting the most challenging and most severe research gaps.

The presentation is based on the following publication:

J. Behrens, F. Løvholt, F. Jalayer, et al. (2021): Probabilistic Tsunami Hazard and Risk Analysis – A Review of Research Gaps, *Frontiers in Earth Science*, 9:114, DOI:10.3389/feart.2021.628772.

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