

EINLADUNG ZUM GASTVORTRAG

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BENEFITS AND LIMITATIONS OF QUANTITATIVE RISK ASSESSMENT IN DEALING WITH NATURAL HAZARDS

Society is exposed to both natural and human-induced risks. While the risk posed by natural hazards can never be eliminated, our goal must be to reduce the risk to levels that are tolerable. Quantitative Risk Assessment (QRA) is a powerful tool for understanding the main drivers of risk and choosing the optimal risk mitigation strategy with the resources available. However, besides the issue of data availability, the usefulness of QRA in dealing with the risk posed by extreme events is questionable. The talk will discuss the problems related to estimating the risk associated with extreme events, with focus on the uncertainty in hazard prediction and prediction of consequences in complex systems. Other approaches, like stress testing of infrastructure and nested safety barriers for critical facilities, could be more useful than QRA for identifying the appropriate risk reduction measures in these situations.

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