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- Title: New progress in landslides generated tsunamis.
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- Abstract: In this talk we present a family of models for the simulation of landslide generated tsunamis. All of them fit in the framework of shallow-flows. Here, the flow is supposed to be modeled by non-hydrostatic shallow-water type systems like those described in [3] and [4], that allow to recover the vertical profile of the velocity, that may be relevant at the early stages of the landslide-fluid interaction. Concerning the evolution of the landslide, either it is considered to be a rigid body and its motion it is supposed to be known, either it is supposed to be modelled by a Savage-Hutter type model ([2]). The resulting system its non-conservative and its discretized using a high-order path-conservative scheme ([1]). Finally, an exhaustive validation procedure have been carrying out by the comparison with laboratory experiments described in ([6, 7]) and real events over real bathymetries ([5]).

References

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