

## Special Issue

# Research on Mathematical Models of Floods

### Message from the Guest Editors

In recent years, flood frequencies and flooding damage appear to be increasing, with worsening social and economic impacts. The development and application of mathematical models capable to predict floods are therefore essential for their management. Models that solve the two-dimensional Shallow Water Equations (2D-SWE) on structured or unstructured grids have become nowadays a common tool, but there are still some challenges that have to be faced to obtain fast and accurate solutions for flood covering vaste areas. Some of them are the following:

- Reduce the computational time even with high-resolution meshes: efforts have been made to increase the performance of models through MPI techniques or GPU parallelization, but there is still room for improvements on this topic;
- Levee breaching modelization:[.....]

For further reading, please follow the link to the Special Issue Website at:

[https://www.mdpi.com/journal/water/special\\_issues/Mathematical\\_Models\\_Floods](https://www.mdpi.com/journal/water/special_issues/Mathematical_Models_Floods)

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 August 2020)



## Water

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### Editor-in-Chief

Dr. Jean-Luc PROBST

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