

## Special Issue

# Fluvial Hydraulics and Applications

### Message from the Guest Editors

Fluvial hydraulics concerns the flow of water in rivers and channels, along with the active interaction with erodible beds, the sediment transport, and the consequent morphodynamical changes. These problems are studied at different scales, through theoretical, numerical, and experimental modeling. Research advances are taking place in all the fluvial hydraulics aspects, and technical applications are gaining a novel vision, being more and more oriented towards ecological-friendly river management and sustainable engineering design. For this Special Issue, original contributions dealing with problems of fluvial hydraulics and relative applications are invited. Papers based on field studies, numerical simulations, and laboratory experiments are suitable, related topics including but not limited to:

- hydrodynamics of river flow in unsteady condition and/or in channel with complex geometries;
- relationship between flow and turbulence structures and sediment transport;
- flow interaction with structures also in the presence of erodible bed;
- river morphodynamic evolution;
- the impact of floods and effects of failure of hydraulic structure, such as levees or dams.

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### Guest Editors

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### Deadline for manuscript submissions

closed (14 May 2021)



## Water

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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### Editor-in-Chief

Dr. Jean-Luc PROBST

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