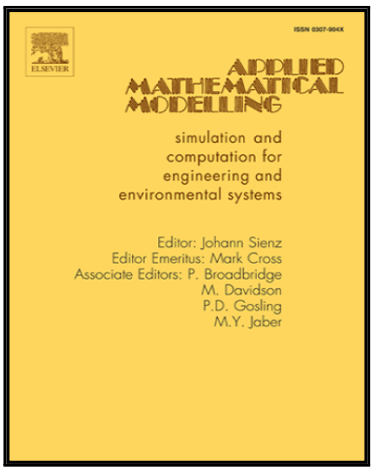

Smoothed Particle Hydrodynamic Simulation of Hydraulic Jump using Periodic Open Boundaries

Patrick Jonsson, Patrik Andreasson, J.Gunnar I. Hellström,
Pär Jonsén, T.Staffan Lundström

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Highlights

- An alternative approach on how to perform SPH hydraulic jump simulations based periodicity is proposed
- The flow rates and jump toe positions showed a quasi-stationary behaviour in time
- The jump toe oscillated with a frequency in good agreement with experimental findings
- Good agreement with previous studies considering both the up- and downstream depth
- Increased SPH resolution and simulation time had minor impact only