

# Insights into Littoral Sand Bed Morphodynamics through Laboratory Experiments

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**MSB 114**

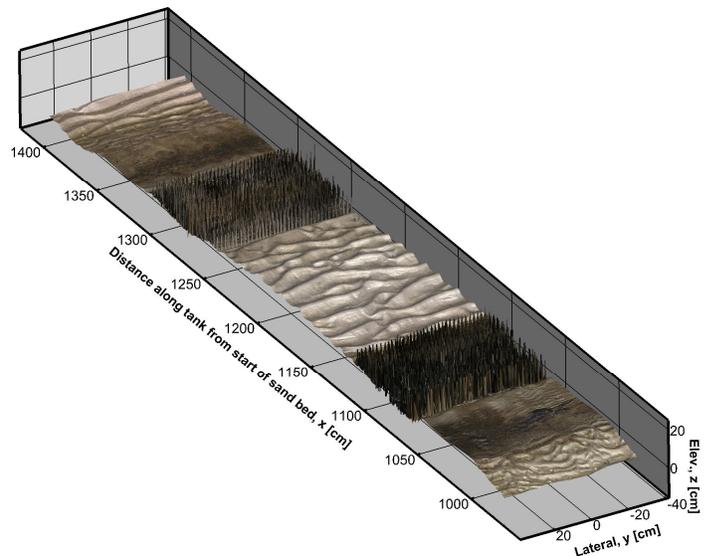
**Wednesday, April 27**

**3:00-3:30pm Coffee Hour**

**3:30-4:30 pm Seminar**

## Abstract

Littoral sediment dynamics can have a significant influence on water wave characteristics through the development of multi-scaled morphological features (sand ripples and bars). Furthermore, the interaction between hydrodynamics and sediment processes influences the fate of underwater objects, seafloor acoustic properties, and near-shore water quality. Large-scale laboratory experimental results will be presented, providing new insight into complex littoral sediment dynamics through the development and adaptation of innovative technologies. Specifically, this study explores the impact of wave envelope spatial variability on bed evolution, sand ripple characteristics, and the effects of submerged vegetation on sediment dynamics.



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