

Institut für Wasser und Umwelt

Fachbereich Wasserbau und Wasserwirtschaft Prof. Dr. Mário Franca

Lecture

Transport Processes in Rivers

(LV-Nr. 6222807)

Lecturer: Dr. Davide Vanzo

Time: Monday, 11:30 to 13:00

Place: Building: 10.83 (L+E) Room: 001/ SR IWU (L+E)

Is offered in: Summer Term

Content:

In this course, we analyze and discuss various transport processes in rivers, focusing on macroscopic particles like natural sediment, wood, urban debris, as well as heat and gas transport. We cover sources and sinks, transport mechanisms, and monitoring techniques for these processes.

By the end of the course, students will be able to describe the main physical mechanisms and ecological implications of different transported elements (debris) in rivers, identify relevant sources and sinks, and evaluate methods for quantifying transport processes.



Fig. 1: Left: plastic transport experiment (from https://doi.org/10.1016/j.watres.2022.119078) Right: mixing processes at Missouri-Mississippi confluence (from Google Earth)