

Seminar@IWG-WB

Prof. Laurent Schmitt

University of Strasbourg, CNRS, ENGEES. Laboratory Image City Environment (UMR7362)

Navigation, hydropower, sediment legacies, functional restoration and transboundary management of the Upper Rhine

31. March 2023

11:30-13:00 Uhr

KIT, Geb. 10.81, Room 305

or online:

https://kit-

lecture.zoom.us/j/69459280451



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Picture: David Eschbach

Abstract

The Rhine is the spine of Western Europe, with an extraordinary multi-millennium history and a great concentration of population and industry, notably based on navigation.

The channel and the floodplain of the Upper Rhine have been affected over 200 km by huge anthropic modifications since two centuries, profoundly altering morphological and ecological functioning and increasing flood risk downstream.

To counteract this evolution, about 140 restoration projects have been carried out along the Upper Rhine since 40 years (reconnection of lateral channels, re-flooding, bank re-erosion, gravel augmentation...), targeting both flood protection and recovery of ecosystem services.

Results are encouraging and motivate managers to develop more ambitious, and in some cases transboundary, restoration projects, though their sustainability remains an open question.



Biography

Laurent Schmitt, geographer and fluvial geomorphologist, obtained his PhD in 2001. He was a lecturer at the University of Lyon 2 from 2002 to 2011 where he obtained his Habilitation in 2010. Since 2011, he has been a professor at the University of Strasbourg. He has directed or co-supervised 11 PhD.

His research, which has led to the publication of 80 articles, chapters and books, focuses on river typology (Rhine, Rhône, Amazon), river sustainable management and restoration (Upper Rhine, Vosges, Moselle, Lyon peri-urban rivers), fluvial paleo-environments and alluvial geoarchaeology (Upper Rhine, Vosges, West Lyon, Italian river deltas, Nile delta).