

# GEOGRAPHISCHES KOLLOQUIUM / LECTURE SERIES

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Donnerstag, 23.11.2017, 16 Uhr c.t., Senatssaal - 7. Stock Geogr. Institut

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**PROF. DR. SCOTT ST. GEORGE**

(University of Minnesota)

**"Expecting the unexpected:  
The relevance of old floods to modern hydrology"**

As one of the most destructive hazards on our planet, floods kill thousands of people and cause billions of dollars in property damage every year. We usually try to gage the risk of future floods by fitting mathematic functions to hydrological data and then extrapolating the upper tail of those distributions. But because large floods are rare and river gage records are short, the conventional approach can sometimes drastically underestimate the threat posed to communities and infrastructure by extreme floods. In this lecture, I'll argue that paleoflood hydrology — the study of ancient floods as recorded by river and lake sediments, trees, caves, and historical documents — is absolutely essential to judge the real risk of large, rare floods. And I'll use examples from North America to illustrate how a 'deeper river memory' can help people evaluate their own vulnerability to floods, weigh the potential benefits of proposed infrastructure projects, and become more aware of what nature is truly capable of producing.

**Einführung und Diskussionsleitung: Prof. Dr. Jan Esper**