



BIWEEKLY COLLOQUIUM
Monday, November 18th, 5.00 pm

**THE OLYMPIA TSUNAMI HYPOTHESIS –
NEW GEOARCHAEOLOGICAL ASPECTS CONCERNING THE
SEDIMENTARY BURIAL OF ANCIENT OLYMPIA (PELOPONNESE,
GREECE)**

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Detailed geo-scientific studies were carried out in the Kladeos and lower Alpheios River valleys in order to clarify the mystery of the rapid burial of Olympia under 4-6 m of sediments after the 6th cent. AD and subsequent erosion of the Kladeos River by 10-12 m down to the flow level already existing during antiquity. Sedimentological, geophysical, geochemical and microfaunal analyses were conducted along the Olympia terrace by means of vibracores and earth resistivity tomography transects. Geomorphological studies revealed strong discrepancies between the present hydraulic potential of the Kladeos River and the dimension and structure of the Olympia terrace. Our results show that the Kladeos River valley and Olympia experienced at least four distinct phases of catastrophic high-energy flood events. Sedimentary, geochemical and faunal traces found in the adjacent Basin of Flokas-Pelopio clearly document multiple tsunami impact. Identical fingerprints and strong stratigraphical correlations were also detected along the Kladeos River beyond the Ridge of Flokas-Platanos. We thus set up the Olympia Tsunami Hypothesis saying that the shallow saddles of the ridge were repeatedly overflowed by tsunami waters and the cult site Olympia was rather destroyed by tsunami than by fluvial processes related to the Kladeos River. Implications of this hypothesis for modern geomorphological research in the coastal Mediterranean will also be discussed.

Venue: Leibnizstraße 1, Seminar Room 204