

# Geowissenschaftliches Kolloquium

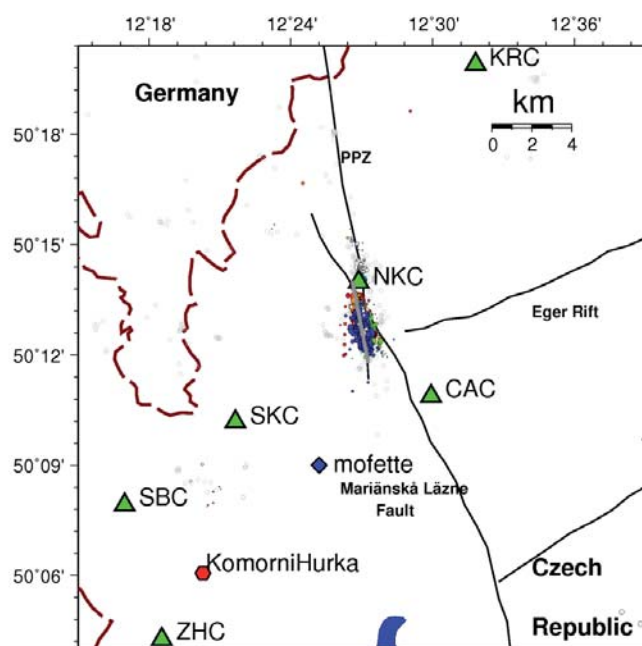
## *Stress and overpressure acting during earthquake swarms: Examples from NW Bohemia*

Donnerstag, 20. Juni - 16.15 Uhr

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In 1899 Josef Knett invented the term “earthquake swarm” to describe a long lasting sequences of moderate earthquakes in 1824 in the Vogtland area. Since then earthquake swarms have been recognized worldwide in different tectonic and volcanic environments, with different durations and nuances and possibly different causes. Fluids play a dominant role in the swarm generation process, and earthquake swarms are therefore a unique opportunity to study fluid rock interaction deep in the crust.



The presentation introduces basic terms and knowledge on the theory of fluid-induced fractures and its relation to induced seismicity and earthquake swarms. The exceptional sequence of swarms in W Bohemia are discussed in detail, with a special focus on the possible nature of the fluids at 8 km depth, and how large the overpressure may grow during the process of swarm generation.

Earthquake swarm region in W Bohemia / Vogtland. Green triangles: seismic stations. Colored circles: earthquakes. Solid lines: tectonic faults. Dashed line: Czech-German border.

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<http://tinyurl.com/geokolloquium>