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## Einladung zu einem ausserordentlichen LES Palaver

**Referent:** **Matthias Willmann**

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**Thema:** **Connectivity - a key to upscaling complex subsurface problems**

**Zeit:** Mittwoch, 09. November 2016, 10.30 Uhr

**Ort:** Sitzungszimmer OHSA/E13

### Abstract

Connected structures are ubiquitous in the subsurface. They lead to preferential pathways for flow and transport and affect larger scale subsurface processes. But it is not well understood how these connected structures can be uniquely quantified or how they affect large scale problems. We present a definition of connectivity based on information of hydraulic conductivity alone. We then derive simple connectivity metrics and relate them to effective flow and early times transport. Finally, we develop an upscaled model based on information of connectivity and extend this to further subsurface processes with emphasis on coupled ones.

Freundliche Grüsse

Georg Kosakowski