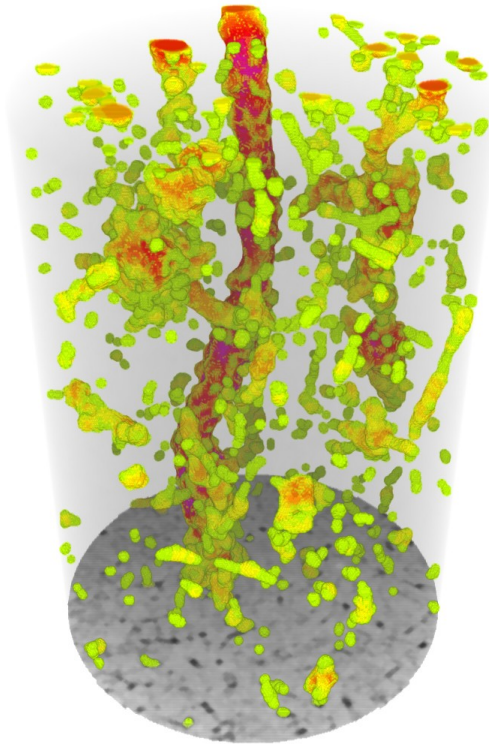
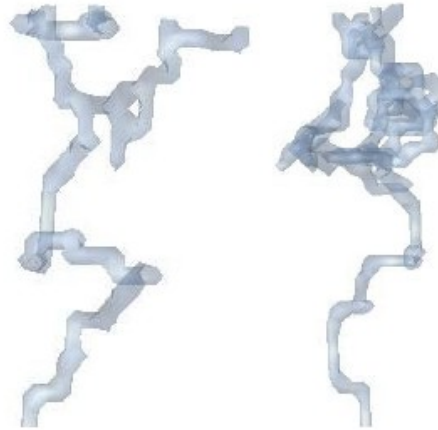


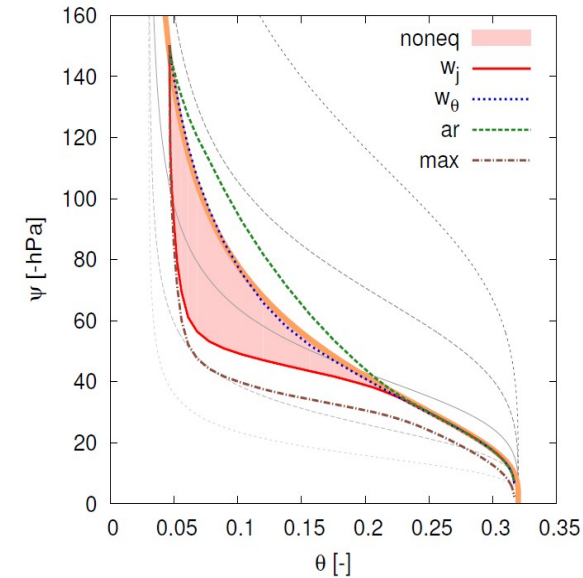
## Measuring



## Modeling



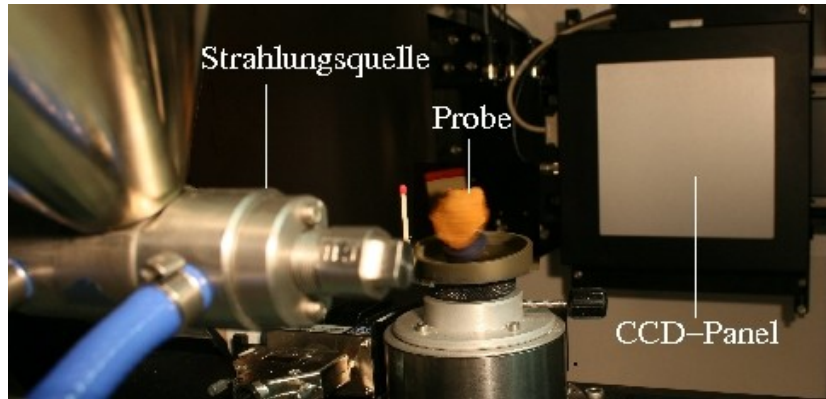
## Implications



# Quantifying the structural connectivity of macropore networks

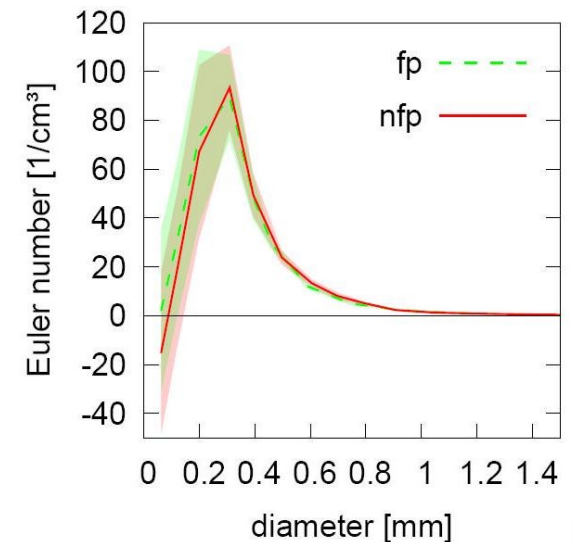
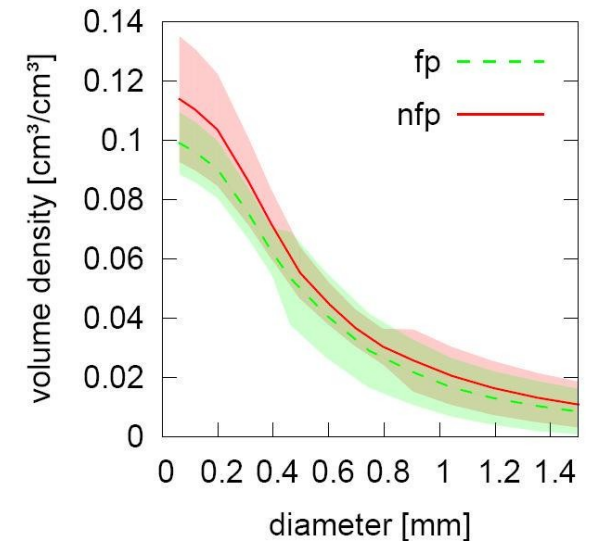
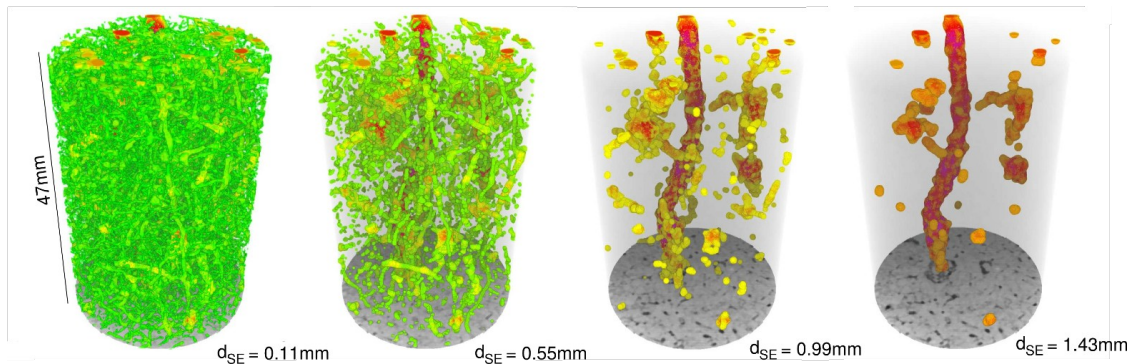
Steffen Schlüter, Hans-Jörg Vogel – Dept. Soil Physics

# Analyzing soil structure using X-ray $\mu$ CT



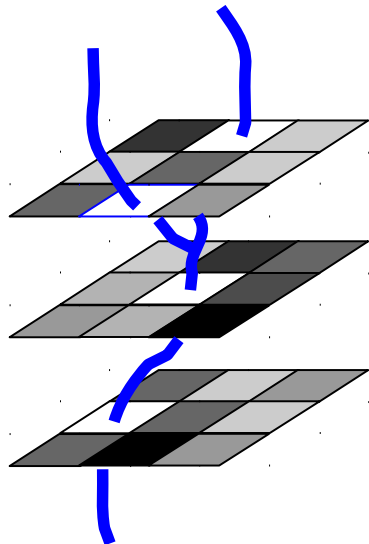
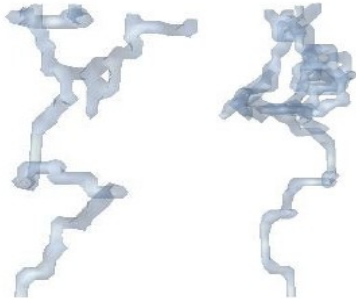
## Image processing library – QuantIm

- Pore size distribution – mathematic morphology
- Connectivity function – Minkowski functionals

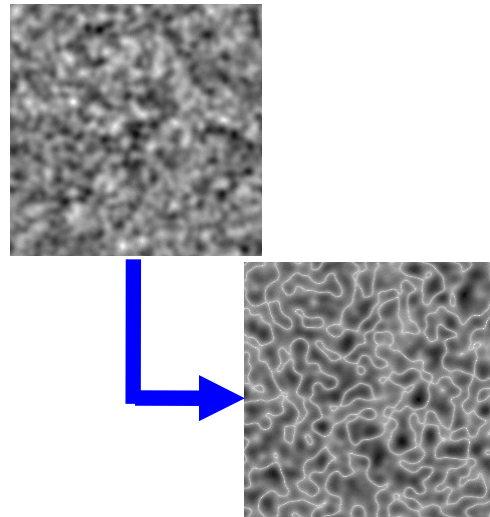
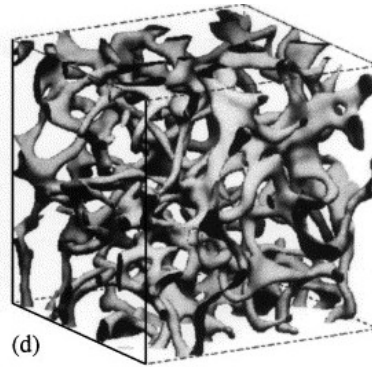


# Modeling macropore networks

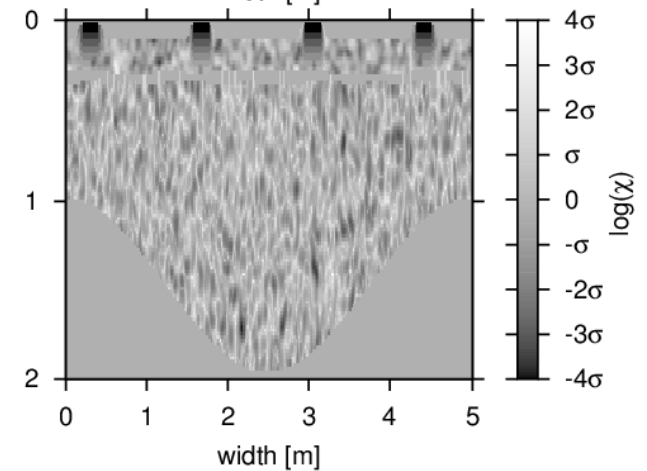
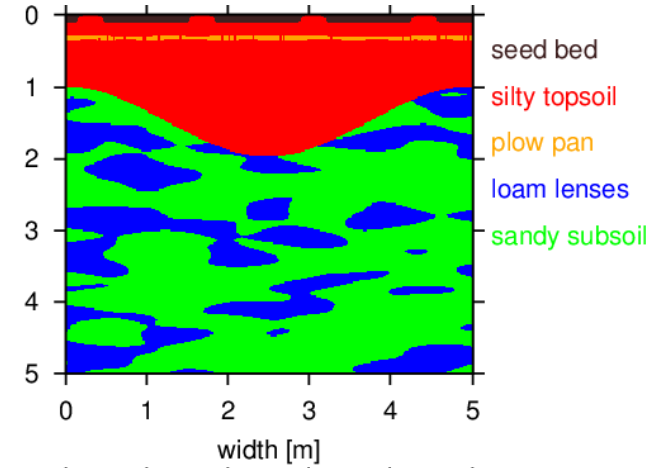
rule-based



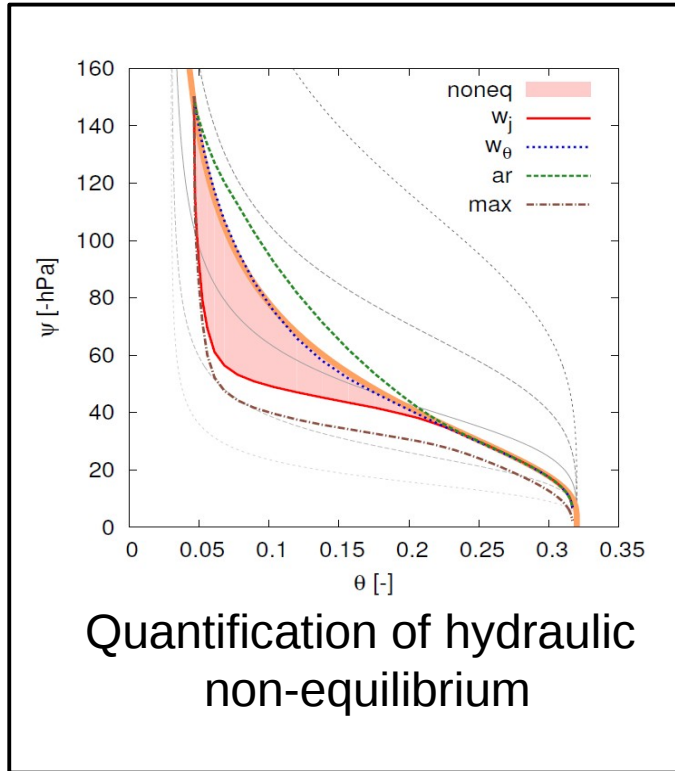
stochastic



deterministic



# Impact of structural connectivity on infiltration



Effect of structural connectivity  
On hydraulic non-equilibrium

