



**FAKULTA
STAVEBNÍ
ČVUT V PRAZE**

Invitation for a lecture organized by Department of Landscape Water Conservation, CTU in Prague. The lecture takes place on **Tuesday, 5th November at 14:00 in room B683** (Faculty of Civil Eng., Thákurova 7, Praha 6).

Monitoring and modelling of soil moisture variability from field to catchment scale

Dr. Heye Bogena, Forschungszentrum Jülich, Germany

Heye is a hydrologist, currently Senior Research Scientist at the Forschungszentrum Jülich and Coordinator of the Helmholtz Initiative TERENO. He has been working, among the other, on a field of soil moisture monitoring using wireless sensor networks and cosmic-ray sensing techniques.

More information:

<https://www.fz-juelich.de/ibg/ibg-3/EN/Staff/B/Bogena%20Heye/Bogena%20Heye.html?nn=1239630>

https://www.researchgate.net/profile/Heye_Bogena

Selected publications:

Baatz, R., H. Bogena, H.-J. Hendricks Franssen, J.A. Huisman, Q. Wei, C. Montzka and H. Vereecken (2014):

Calibration of a catchment scale cosmic-ray soil moisture network: A comparison of three different methods. *J. Hydrol.* 516: 231-244, doi: 10.1016/j.jhydrol.2014.02.026

Vereecken, H., J.A. Huisman, Y. Pachepsky, C. Montzka, J. van der Kruk, H. Bogena, L. Weihermüller, M. Herbst, G. Martinez and J. Vanderborcht (2014): On the spatio-temporal dynamics of soil water content at the field scale. *J. Hydrol.* 516: 76–96, doi: 10.1016/j.jhydrol.2013.11.061

Bogena, H.R., J.A. Huisman, R. Baatz, R., H.-J. Hendricks Franssen and H. Vereecken (2013): Accuracy of the cosmic-ray soil water content probe in humid forest ecosystems: The worst case scenario. *Water Resour. Res.*, 49 (9): 5778-5791, DOI: 10.1002/wrcr.20463

Stockinger, Michael & Bogena, Heye & Lücke, Andreas & Stumpp, Christine & Vereecken, Harry. (2019). Time-variability of the fraction of young water in a small headwater catchment. *Hydrology and Earth System Sciences Discussions.* 1-25. 10.5194/hess-2018-604.