

# BayCEER Kolloquium

Lectures in Ecology and  
Environmental Research

Summer 2017



UNIVERSITÄT  
BAYREUTH

Thursday

**04.05.2017**

**14:00 in H10, NW I**

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# An approach to simulation of large lake-aquifer-systems: Semi-arid Nebraska Sandhills

In many regions of the world, large systems of shallow water bodies include hundreds and thousands of lakes and wetlands, integrated with climate- and human-controlled groundwater. In some cases, like in China and Mongolia, a dramatic reduction of areas and numbers of such lakes is observed. Disparity between spatial-temporal scales of each surface-water body and the entire system presents grand challenge to their modeling, and practical approaches are needed.

We explore feasibility of modeling for the Nebraska Sand Hills, a large, grass-stabilized dune region containing thousands of small closed-basin lakes and wetlands in hydraulic connection with the Northern High Plains Aquifer.