



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

## SEMINAR ANNOUNCEMENT

19<sup>th</sup> September 2018, h 11:30  
ETH Zurich  
Room: HIT F 32, Hönggerberg Campus, Zurich

**Prof. Dr. Allen Hunt**

*Department of Physics and of Earth & Environmental Sciences, Wright State University, Dayton, Ohio*

### **SCALING RESULTS FOR TRANSPIRATION, VEGETATION GROWTH, CHEMICAL WEATHERING AND SOIL PRODUCTION.**

Non-gaussian advective solute transport from percolation theory inspires some results for scaling chemical weathering and vegetation growth. The usefulness of these results is verified over a wide range of time scales and also unites lab and field weathering experiments into a single framework. Vegetation growth results can then be further utilized to explain the dependence of net primary productivity on transpiration, as well as spatial variability of growth rates in particular tree species. The two processes focused on represent the largest terrestrial carbon sinks, meaning that the results have a wide relevance to a number of societal issues.

#### **Professor Allen Hunt**

*Ph.D. in theoretical physics (1983)*

*Fulbright scholar (1985-1987)*

*Post-doc stochastic subsurface hydrology (1992-1994)*

*M.A. field geomorphology (1996)*

*Visiting Professor, Climate Dynamics, Pacific Northwest National Lab, 1999-2002*

*Program Director, Hydrologic Sciences, NSF, 2002 -2003*

*Professor, Physics and of Earth & Environmental Sciences, Wright State University, since 2007*