

## **On Needed Interactions between the Experimentalist and the Modeler: Moving beyond the dialog**

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Despite years of trying, the gap between the experimentalist and the modeler is not narrowing; if anything, it might even be widening. The experimentalists are discovering an ever more rich array of landscape heterogeneities and process complexities, more details about macropores, residence time distributions, paradox of old and new water. The modelers continue with the same old ways of abstracting the basic process knowledge into models that can be used for predictions at large scales.

Dealing with human induced land use or climate changes in these predictions is an additional burden. How can we enable the two groups to work together? through a new broader language and/or theoretical framework that engage both measurers and modelers? through virtual models used to generate hypotheses which are then tested in field experiments?

Through more focused efforts to generalize field results to other places and to other scales? These ideas are not new, and so why are these not adopted routinely? I hope to raise these issues in my introduction, so that we can have a free discussion at the end of the two keynote talks.