Tuesday, September 13, 2016

Black Lab Pub, Churchill Room • 4100 Montrose Blvd.
Social 5:30 p.m., Dinner 6:30 p.m.

Cost: $30 Preregistered members; $35 non-members/walk-ups

To guarantee a seat, pre-register on the HGS website & pre-pay by credit card.
Pre-registration without payment will not be accepted.
Walk-ups may pay at the door if extra seats are available.

If you are an Active or Associate Member who is unemployed and would like to attend this meeting, please call the HGS office for a discounted registration cost. We are also seeking members to volunteer at the registration desk for this and other events.

Dr. Ty Ferré
Department of Hydrology and Atmospheric Sciences at the University of Arizona

Seeing Things Differently: Rethinking the Relationship Between Data, Models, and Decision-Making

Practicing hydrogeologists construct detailed numerical models to predict the responses of hydrologic systems to natural and applied stresses. These predictions form the basis for decisions that must balance optimal use of resources and ecosystem support. Increasingly, hydrogeologists are providing measures of the uncertainty of their predictions, often based on automated parameter estimation approaches. Dr. Ferré will build from the basic concepts of decision science to make the case that we are not providing the results that are most useful to support decisions in water resource management or contaminant transport and remediation. He will present a different approach to the construction and use of numerical models to support decision making. He will then encourage discussion and debate about the merits and limitations of this proposed approach. Finally, he will show that this new approach to hydrogeologic analysis also supports more efficient design of hydrogeologic investigations. ■

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Biographical Sketch

Dr. Ty Ferré, a professor in the Department of Hydrology and Atmospheric Sciences at the University of Arizona, will present the 2016 Darcy Lecture. Dr. Ferré's research interests include the optimal use of indirect measurements (including geophysics) for hydrogeologic analysis. More generally, he is interested in the interplay between data collection and model-based quantitative analysis for scientific support of decision making in complex and contentious settings. He will deliver the talk to over 100 audiences, around the world, ranging from leading researchers, to practicing hydrogeologists, to stakeholders. The goal of the lecture is to foster a conversation about the role of science in general, and hydrogeology in particular, in public debates related to natural resources.