

Science Gateways and the Science Gateways Community Institute (SGCI) with Dr. Sandra Gesing

Tuesday October 30 – 11am – 1pm – TUC 400B

FREE REGISTRATION – LUNCH PROVIDED

Science Gateways - also called virtual research environments or virtual labs - allow science and engineering communities to access shared data, software, computing services, instruments and other resources specific to their disciplines and use them also in teaching environments. The U.S. Science Gateways Community Institute (SGCI) provides free resources, services, experts, and ideas for creating and sustaining science gateways.

General Introduction to Science Gateways & the Science Gateways Community Institute (SGCI)

In the last decade mature complete science gateway frameworks have evolved such as [HUBzero](#), [Galaxy](#), [Agave](#) and [Apache Airavata](#). Successful implementations have been adapted for several science gateways, for example, the technologies behind the science gateways [CIPRES](#), which is used by over 25.000 users to date and serves the community in the area of large phylogenetic trees. Lessons learned from the last decade include that approaches should be technology agnostic, use standard web technologies or deliver a complete solution. Independent of the technology, the major driver for science gateways are the user communities and user engagement is key for successful science gateways. The US [Science Gateways Community Institute](#) (SGCI), opened in August 2016, **provides free resources, services, experts, and ideas for creating and sustaining science gateways**. It offers five areas of services to the science gateway developer and user communities: the **Incubator, Extended Developer Support, the Scientific Software Collaborative, Community Engagement and Exchange, and Workforce Development**. *The talk will give an introduction to science gateways, examples for science gateways & an overview on the services offered by the SGCI to serve user communities & developers for creating successful science gateways.*



Dr. Gesing is a research assistant professor at the Department of Computer Science and Engineering and a computational scientist at the Center for Research Computing at the University of Notre Dame. Prior, she was a research associate in the Data-Intensive Research Group at the University of Edinburgh, UK, in the area of data-intensive workflows and in the Applied Bioinformatics Group at the University of Tübingen, Germany, in the area of science gateways and grid computing. Her research interests include **science gateways, computational workflows, distributed and parallel computing**. <http://sandra-gesing.com/>
