CNSECCS Symposium Overview

Shawn McKee, CNSECCS Director



CNSECCS

Welcome everyone to the first Symposium of the Center for Network and Storage Enabled Collaborative Computational Science (CNSECCS)

The **Center** was founded about 1 year ago to address the challenges of extracting scientific results collaboratively from large, distributed or diverse data.

Our Symposium today will be exploring the Center's themes from a number of diverse set of perspectives:

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- Science use-cases and associated difficulties
- Technologies
- Projects
- Funding

CNSECCS Details

Before we cover the Symposium details it is appropriate to provide more information about the Center

The Center supports its members and the broader scientific community in sharing expertise, knowledge and practical methods that can better enable scientific discovery for groups of scientists working together on "big, distributed or diverse data". **Example questions to address:**

- What are the best practices for collaboratively working on large, potentially diverse or distributed, datasets?
- What tools, technologies and techniques are most effective at addressing the challenges faced by such researchers?
- How should data best be stored, organized, indexed and made accessible to improve the ability of scientists to jointly work with one another, especially across the dimensions of time and space?
 MICDE MICHIGAN INSTITUTE FOR COMPUTATIONAL DISCOVERY & ENGINEERING

Symposium Overview

The Symposium is organized along four main tracks

- Science Use Cases --- These are examples of science domains that would benefit from addressing the questions our Center is exploring.
- **Related Projects** --- This track covers projects working on providing solutions applicable to the themes of the Center.
- **Complementary Technology Solutions** --- This track provides presentations on applicable technologies that might be used to meet the Center's challenges.
- **Funding Agency Perspectives** --- In this track we will hear from three federal funding agencies, DOE, NIH and NSF, on their perspectives about the challenges the Center is addressing

Each presentation slot will leave time for questions or comments



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Symposium Goals

This Symposium is bringing together a diverse set of participants, from domain scientists, to IT specialists, computing and infrastructure researchers and funding agency representatives.

• This type of cross-disciplinary participation is required to make progress in addressing the questions posed earlier.

We have intentionally inserted longer breaks and our social dinner tonight to give all the participants time to interact and discuss the topics of the Symposium.

Tomorrow we will have a wrap-up session that will give everyone a chance to provide their perspective and suggestions for follow-on work.

Our **goal** is to further our collective understanding of where we are in addressing the collaborative, data-intensive needs of domain science and charting next steps.



CNSECCS Steering Committee

The scientific program and symposium planning was done by our Center's Steering Committee:

- Brian Arbic Earth and Environmental Sciences
- Mariana Carrasco-Teja MICDE
- Ivo Dinov --- Nursing
- Hiroko Dodge --- Neurology
- Krishna Garikipati Mechanical Engineering
- Richard Gonzalez --- Psychology and Statistics
- Shawn McKee --- Physics
- William Wen --- Biostatistics

Many thanks for their help in pulling this Symposium together!



Local Organizing Committee

• Of course we couldn't have had this Symposium without all the help of the local organizing committee who handled logistics, venue setup, organizing breaks, creating programs and nametags and ensuring everything works smoothly:

Mariana Carrasco-Teja Sarah Hallum Dan Meisler

And additional setup help from **Bob Ball**

• Many thanks to them for their efforts to make this Symposium a success.



Welcome to the Symposium!

- We are looking forward to an exciting, diverse Symposium covering the themes of our Center.
- Many thanks to our Speakers for participating in this Symposium
- Last but not least, thanks to all of you for attending!
- With that, let's continue on to the first session of the Symposium: **Related Projects**, convened by Krishna Garikipati

(Timetable at https://indico.cern.ch/event/622909/timetable/#20170518)

