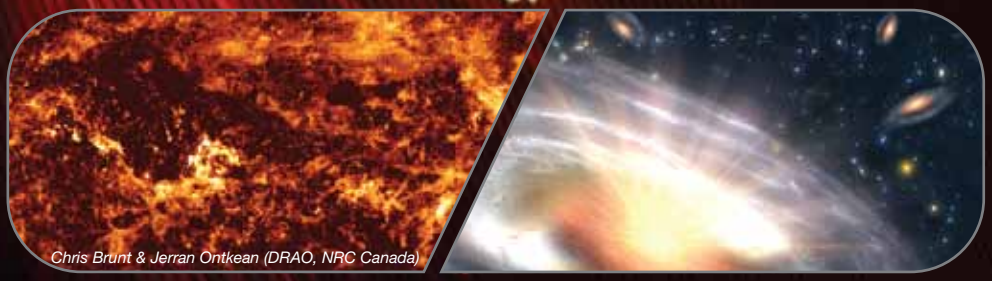
Chris Brunt & Jerran Ontkean (DRAO, NRC Canada)

Canada Takes Central Role in Global Mega-Science Project

Canadians are Data Architects for World's Largest Radio Telescope

Project Name: CyberSKA

Project Lead: University of Calgary

CANARIE contribution: $2.1M

Participants:

- Cornell University, New York
- Cybera, Alberta
- IBM Canada
- McGill University, Montreal, Quebec
- National Research Council Canada
- University of British Columbia
- University of British Columbia, Okanagan
- Calgary Scientific, Alberta

What *is* CyberSKA?

CyberSKA is an innovative, custom-designed platform that will meet evolving data and information handling needs of the Square Kilometer Array (SKA), the largest radio-telescope ever to be built. Over the next decade, the architecture and functionality of the Canadian-led CyberSKA will allow unprecedented quantities of astrophysical data collected by the SKA to be efficiently and effectively collected, stored, transformed, analyzed, and re-used by collaborating scientists around the world.

CyberSKA will be deployed using the CANARIE high-speed network as a distributed system consisting initially of sites from several North American universities. These sites will host data management, processing, visualization and other services that can be accessed via a portal enhanced with social networking features.

Value to Research and to Canada:

- Establishes Canada at the forefront of long-term, global mega-science
- Gives Canada global lead in the essential work of digital infrastructure collaboration and product development for managing "Big Data"
- Enhances Canada's research, development and innovation capacities, essential to employment, economic development and growth in increasingly significant fields of data-intensive science and industry

Find out more: www.CANARIE.ca/en/programs or www.cyberska.org

Did you know?

The Square Kilometre Array will help scientists determine, among other things, how the first stars were formed, if Einstein's theory of relativity is correct, and if we are alone in the universe.


Cygnus radio image if the Milky Way produced in Canada (Canadian Galactic Plane Survey)

Screen capture of the Cyber-SKA platform.