# Accelerating International Collaboration and Science Through Connective Computation



## **Report of Contributions**

Contribution ID: 0 Type: not specified

#### **Greetings from the Organizers**

Tuesday, 10 March 2015 10:00 (5 minutes)

**Presenters:** MAZUMDAR, Kajari (Tata Inst. of Fundamental Research (IN)); RANJAN, Kirti (University of Delhi (IN)); DAVE, Paul (University of Chicago and Argonne National Laboratory); GARDNER JR, Robert William (University of Chicago (US))

Session Classification: Introductions and Overview

Contribution ID: 1 Type: not specified

#### **Participants Introduction**

Tuesday, 10 March 2015 10:05 (10 minutes)

**Session Classification:** Introductions and Overview

Contribution ID: 2 Type: not specified

#### The UChicago Center in Delhi

Tuesday, 10 March 2015 10:15 (10 minutes)

Presenter: Mr VISWESWARIAH, Bharath

**Session Classification:** Introductions and Overview

Contribution ID: 3 Type: not specified

#### Workshop Goals and Overview

Tuesday, 10 March 2015 10:45 (15 minutes)

Presenter: GARDNER JR, Robert William (University of Chicago (US))

Session Classification: Introductions and Overview

Contribution ID: 4 Type: **not specified** 

# A Common Connection: CMS (LHC @ CERN) Computing

Tuesday, 10 March 2015 10:25 (20 minutes)

Presenters: MAZUMDAR, Kajari (Tata Inst. of Fundamental Research (IN)); RANJAN, Kirti (Uni-

versity of Delhi (IN))

**Session Classification:** Introductions and Overview

Contribution ID: 5 Type: **not specified** 

# C-DAC, and its role in innovation of advanced cyberinfrastructure for science

Tuesday, 10 March 2015 11:00 (30 minutes)

Presenter: Dr CHATTOPADHAYA, Subrata (CDAC, Bangalore)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 6 Type: not specified

## International Networking and the National Knowledge Network

Tuesday, 10 March 2015 11:50 (25 minutes)

Presenter: MANI, RS (National Knowledge Network)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 7 Type: not specified

### Computational challenges in gravitational-wave astronomy

The two detectors of the Laser Interferometer Gravitational-wave Observatory (LIGO) in the US are set to begin their first observation run in a few months following hardware upgrades during the past few years. A few other detectors in the world, possibly including one in India, called LIGO-India, are expected to join them in the coming years to usher in the era of gravitational wave (GW) astronomy. Such a multi-baseline network will be able to localize GW transients, e.g., the merger of neutron star binaries, that it detects to within a few to tens of square-degrees. This presents both an opportunity and a challenge to other observatories that are in pursuit of their electromagnetic (EM) and particle counterparts, e.g., in the form of afterglows. The opportunity is to develop a more complete understanding of these sources. On the other hand, one of the primary challenges is computational. In this talk, I will describe how preparations are being made to scan large volumes of data with huge banks of theoretically modeled signal patterns to search for transient and occasional astronomical signals so that interesting GW candidates can be communicated for EM follow-ups promptly.

**Presenter:** Prof. BOSE, Sukanta (Inter University centre for Astronomy and Astrophysics)

Contribution ID: 8 Type: not specified

# importance of standards in any collaborative shared and connecting computing environment

Tuesday, 10 March 2015 12:40 (25 minutes)

**Presenter:** Dr BHATTACHARYYA, Sumanbhushan (Tata Consultance Services)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 9 Type: not specified

#### **Indian Council for Medical Research**

Tuesday, 10 March 2015 13:05 (25 minutes)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 10 Type: not specified

#### Summary of the Hands On working group

Wednesday, 11 March 2015 11:15 (30 minutes)

Contribution ID: 11 Type: not specified

#### **Summary of the Strategic Planning**

Wednesday, 11 March 2015 11:45 (30 minutes)

Close out

Contribution ID: 12 Type: not specified

#### **Close out**

Wednesday, 11 March 2015 12:15 (10 minutes)

Contribution ID: 13 Type: not specified

## Computation at the University of Chicago and Argonne National Laboratory

Tuesday, 10 March 2015 15:45 (20 minutes)

Presenter: DAVE, Paul (University of Chicago and Argonne National Laboratory)

Session Classification: US Cyberinfrastructure Initiatives

Contribution ID: 14 Type: not specified

#### **OSG Connect & U.S. National Cyberinfrastructure**

Tuesday, 10 March 2015 16:25 (20 minutes)

Presenter: GARDNER JR, Robert William (University of Chicago (US))

Session Classification: US Cyberinfrastructure Initiatives

Contribution ID: 15 Type: not specified

#### The Globus Platform of Services

Tuesday, 10 March 2015 16:05 (20 minutes)

**Presenter:** SULAKHE, Dinanath (Argonne National Laboratory)

Session Classification: US Cyberinfrastructure Initiatives

Contribution ID: 16 Type: not specified

# The quest to understand initiation of cell signaling through high performance computations

Tuesday, 10 March 2015 14:45 (20 minutes)

Presenter: Prof. VENKATRAMANI, Ravi (TIFR)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 17 Type: not specified

## Finite-difference time-domain computations in nanophotonics

Tuesday, 10 March 2015 15:05 (20 minutes)

Presenter: Prof. MUJUMDAR, Sushil (TIFR)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 18 Type: not specified

## Computational challenges in gravitational-wave astronomy

Wednesday, 11 March 2015 09:00 (30 minutes)

Presenter: Prof. BOSE, Sukanta (IUCAA, Pune)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 19 Type: not specified

# IT Infrastructure and Computing needs in Delhi University

Tuesday, 10 March 2015 12:15 (25 minutes)

**Presenter:** Dr GUPTA, Ajay (Delhi University)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 20 Type: not specified

# Nuclear Physics with shared large-scale facilities: challenges and opportunities

Tuesday, 10 March 2015 15:25 (20 minutes)

**Presenter:** Dr MUKHERJEE, Sumit (Inter University Accelerator centre)

Session Classification: Scientific Computing Landscape in India

Contribution ID: 21 Type: not specified

#### **Scientometrics**

Wednesday, 11 March 2015 09:30 (10 minutes)

**Presenter:** Dr BASU, Aparna

Session Classification: Scientific Computing Landscape in India