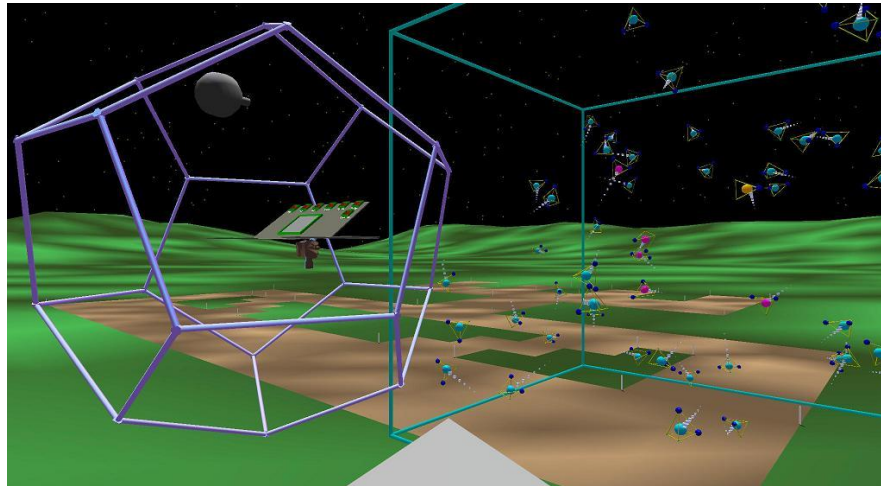


My Jobs at CERN

David.Collados@cern.ch

University - 1993

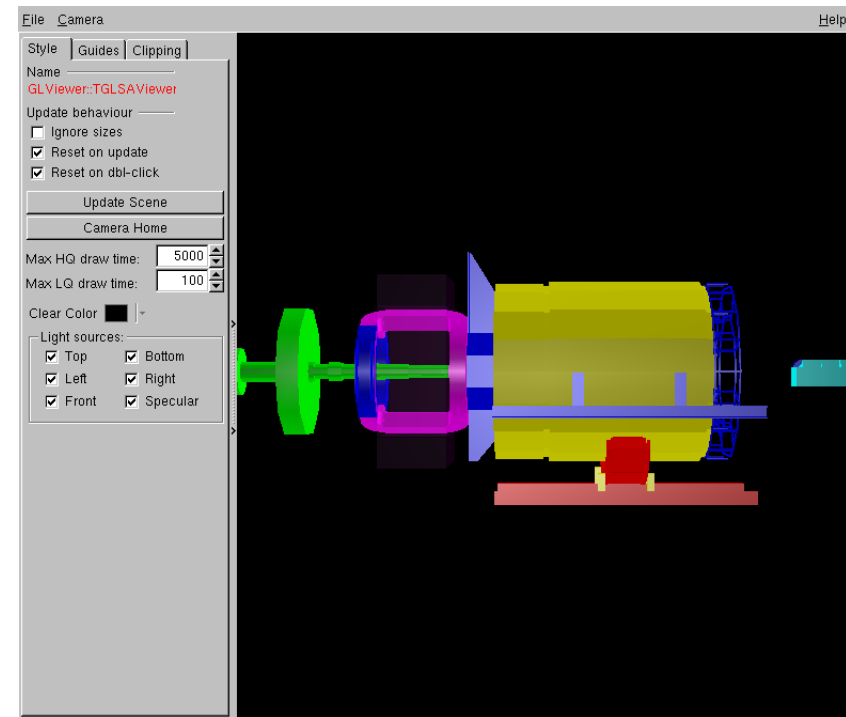
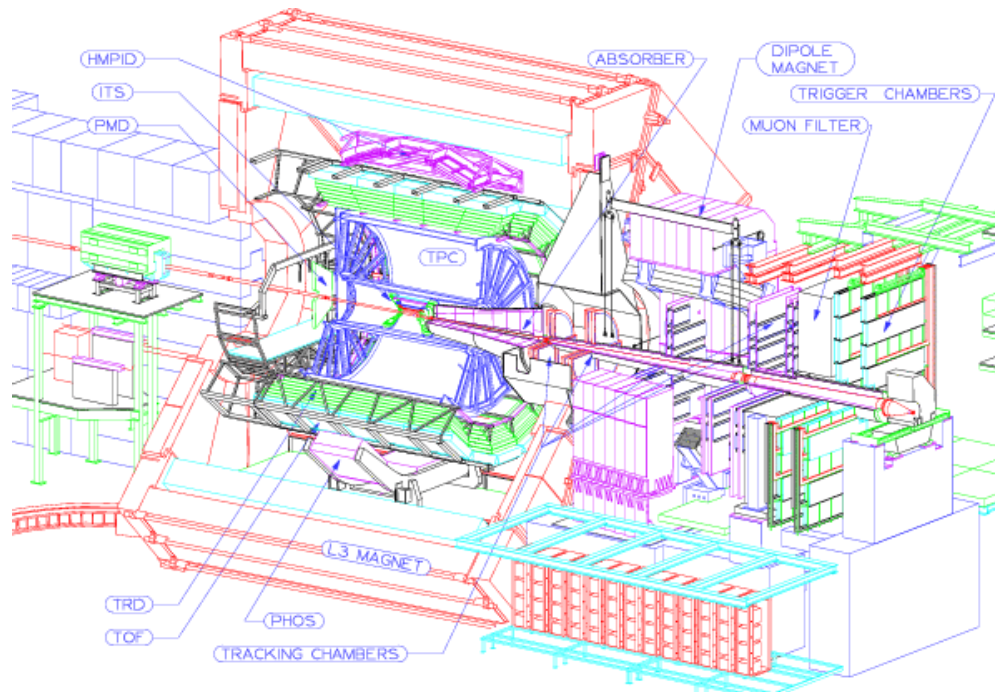
- **Computer Engineer (Granada, Spain)**
 - Math, programming, algorithms, databases.
- **Exchange Student (New Mexico, USA) - 1997**
 - Weekly evaluations. Practical approach
 - 'Homunculus' Virtual Reality project @ Albuquerque HPCC
 - Simulation & comprehension of complex software systems



EP/AIP Technical Student - 1998

- **ALICE Off-line Project**

- AliRoot framework for simulation, reconstruction and analysis.
- Develop application for visualization of the experiment



IT/IS – Videoconferencing - 1999

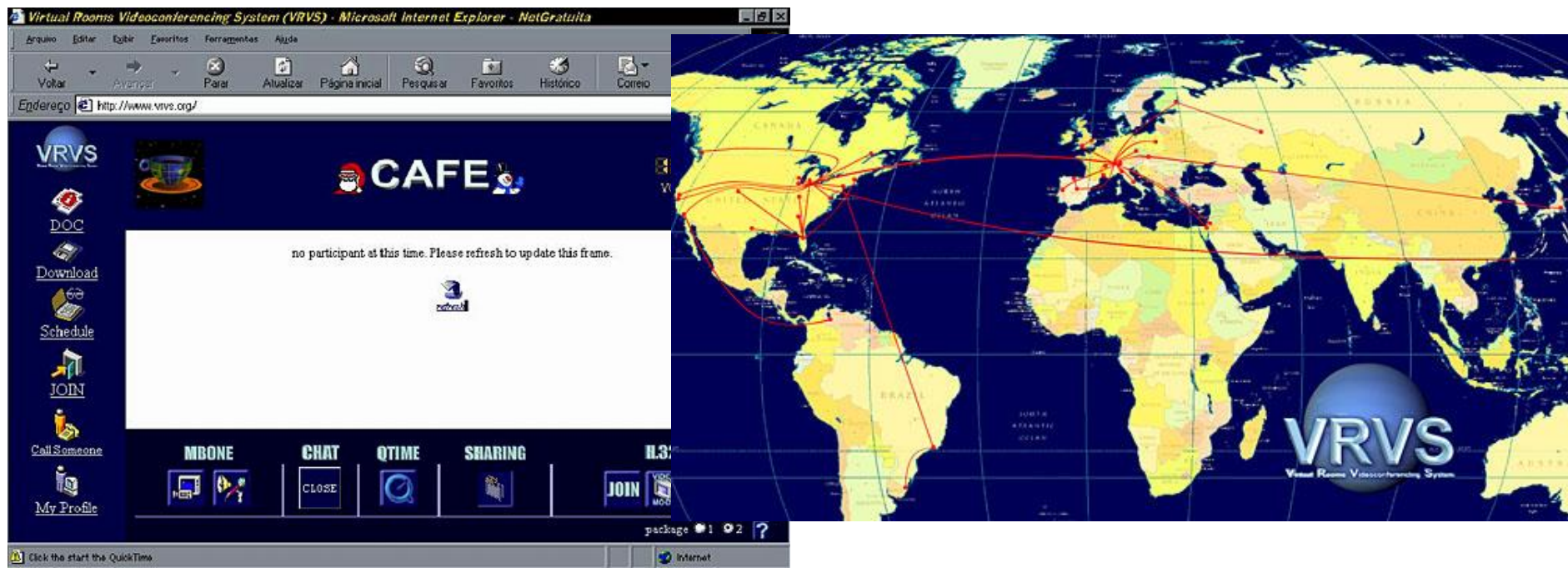
- Maintenance of the videoconferencing HW in the rooms
- User support in rooms (different hardware & software)



- Documentation, automation, configuration, hardware evaluation, discussions with users and experiments

IT/IS - Videoconferencing

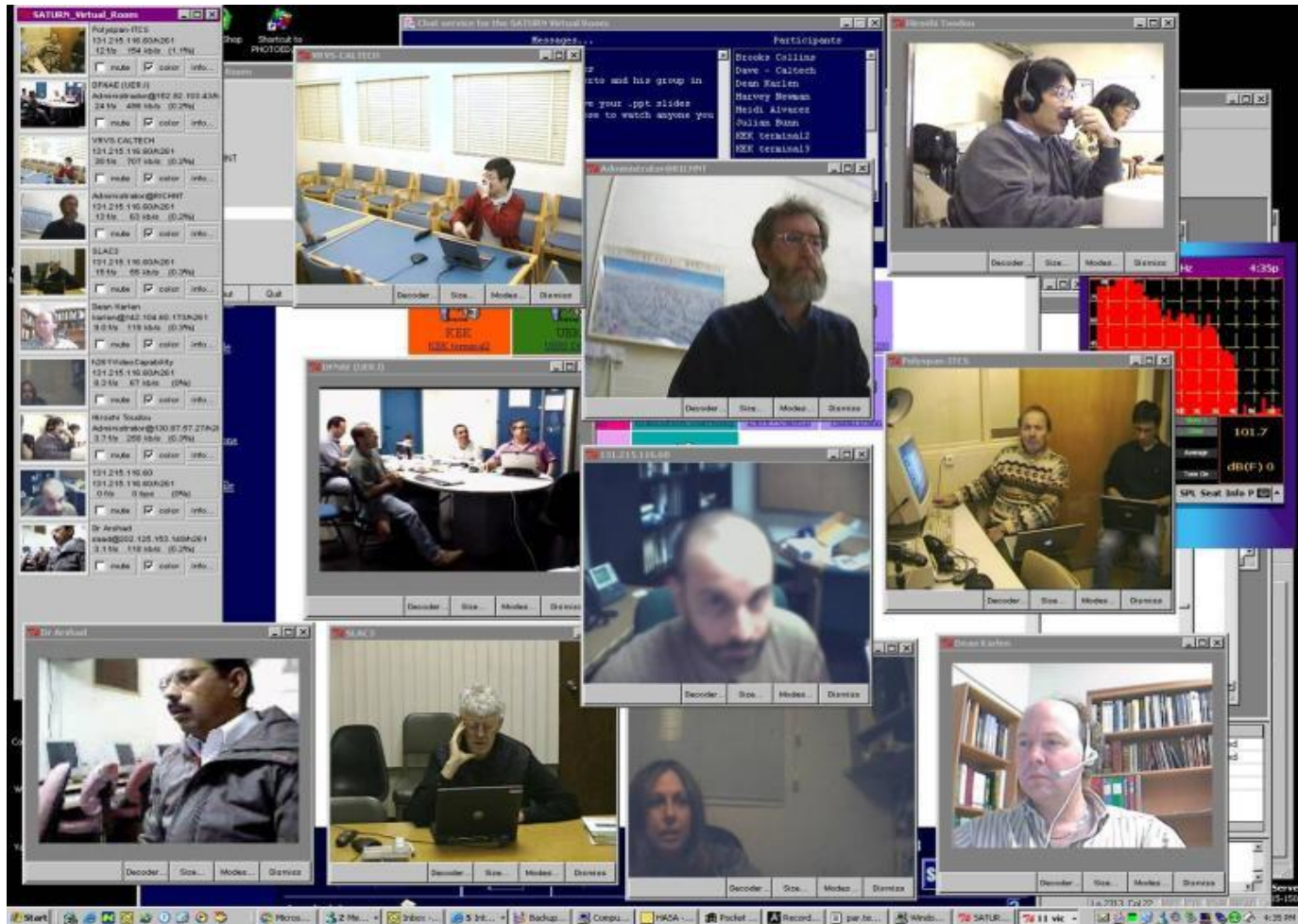
- **Virtual Room Videoconferencing System (VRVS)**
 - Developer, user support, service manager



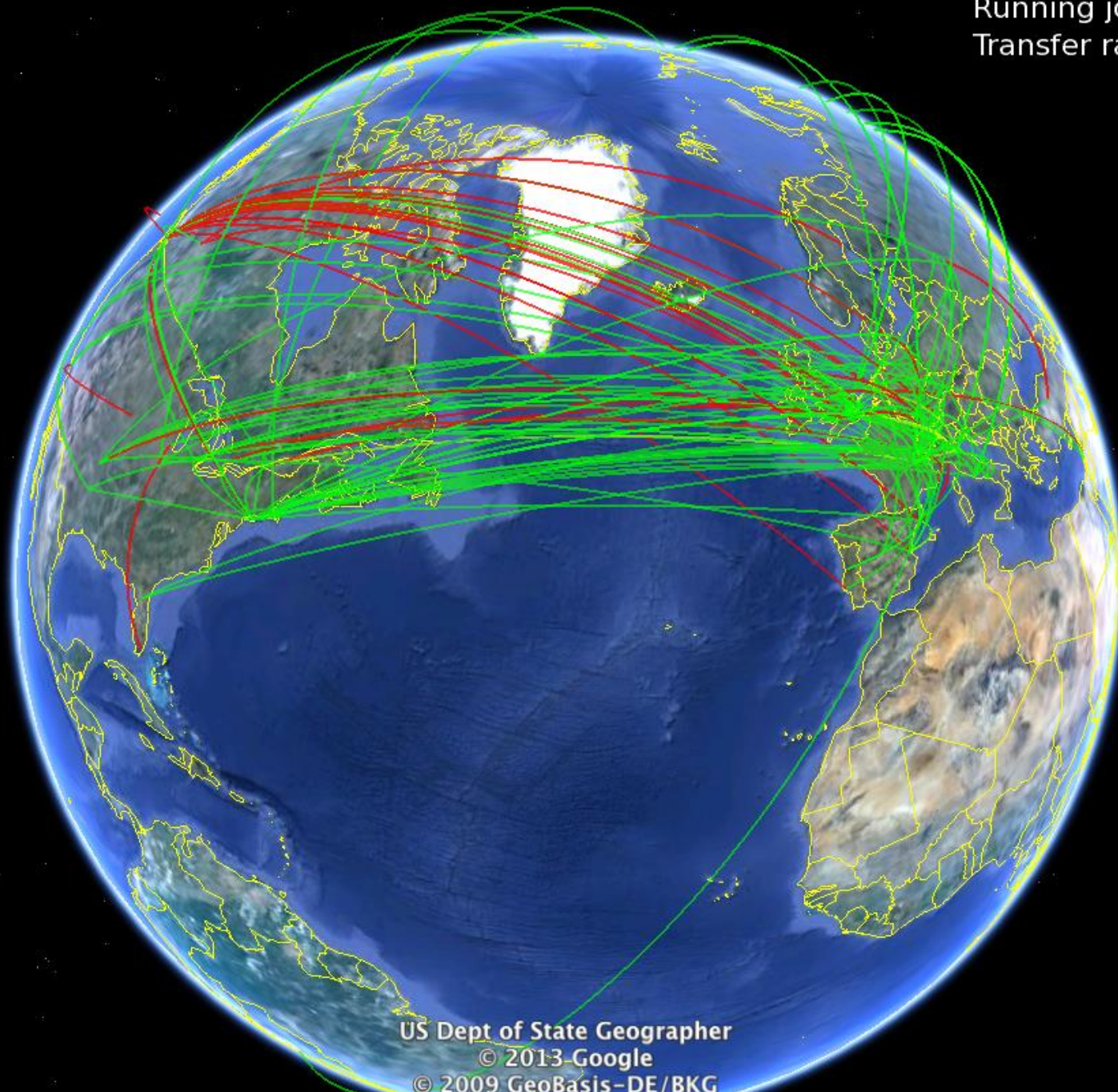
- Deploy & maintain the network of reflectors (traffic distribution)

IT/IS - Videoconferencing

- Providing real time global collaboration to educational & research communities



Running jobs: 236092
Transfer rate: 11.41 GiB/sec



US Dept of State Geographer
© 2013-Google
© 2009 GeoBasis-DE/BKG
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google

EGEE - IT/GM - Testing - 2004

- **Testing components of the gLite middleware**
 - IO Server and Fireman Catalogs (MySQL & Oracle)
- **Test the installation, configuration, functionality, stress testing, regression tests**
 - While reporting results on each release
- **In collaboration with the ARDA (A Realisation of Distributed Analysis for LHC) team**
- **Improve the reliability of these components, finding bugs, reporting to the developers, building test suites**

IT/GD – Operations – 2006

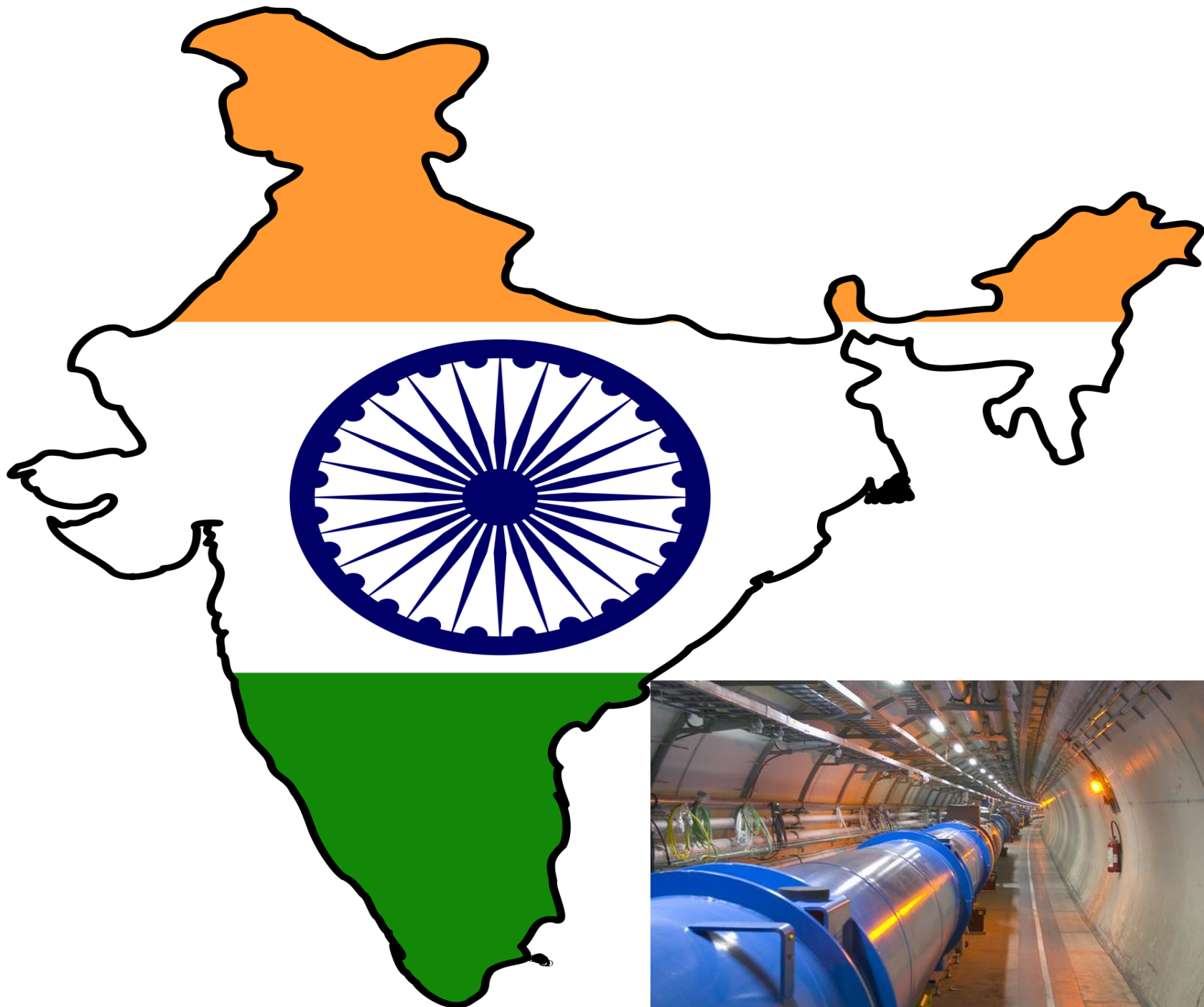
- **Develop Service Availability Monitoring (SAM) framework**
 - Increase reliability of WLCG sites by testing services
 - Monitor WLCG sites and evaluate their performance
- **Involved in the EGEE and OSG Operations Teams**
- **Grid monitoring support & service manager**
- **Support the WLCG management board**
- **Member of Operational Security Coordination Team**
- **Collaborate in monitoring, debugging and support to Atlas production activities**
- **Third level service expert for catalogs (LFC)**

IT/GT - Tools for Ops & Monitoring - 2011

- **IT/GT/TOM Section Leader**
- **WLCG Monitoring & Information Systems**
- **CERN-India Collaboration in Computing for LHC**

IT/DB – Database Services - 2013

- **Database on Demand Service**
- **IT/DB Monitoring Strategy and Tools**
- **CERN-India Collaboration in Computing**



India – CERN Collaboration in Computing

- **Protocol P060/LHC (2002-2016), Computing and Grid Technology for LHC**
- **780 Person months involved since 2003**
- **Wide range of computational areas:**
 - Grid Performance monitoring
 - Scientific Library
 - AFS
 - AliEn (AliEn to GridFTP and AliEn storage element)
 - Problem tracking Grid performance
 - Fabric Management & LCG Visualization
 - Database/CORAL/MySQL
 - Grid Monitoring (GridView and MyWLCG)
 - Cloud Management (CloudMan and OpenStack)

India – CERN Collaborations

- **CMS, early 90's, observer, study Higgs boson properties, super-symmetry, extra dimensions**
- **ALICE, 1995, PMD and Muon Spectrometer, Indian team >100 members**
- **NAT projects: CLIC, CTF3, LINAC4**
- **Hardware, Software, and Commissioning**
 - Superconducting Corrector Magnets for LHC
 - Precision Motion Positioning System Jacks (dipole magnets)
 - Quench Heater Power Supplies and Local Protection Units



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