

# Welcome to CERN

European

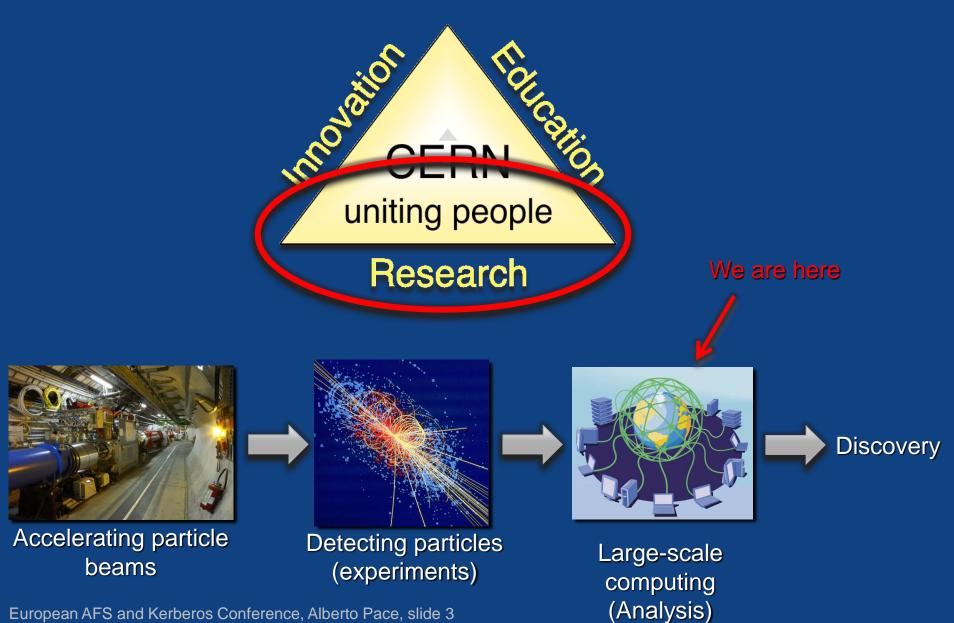
AFS and Kerberos

Conference

Alberto Pace, alberto.pace@cern.ch

CERN, Accelerating Science and Innovation

#### The Mission of CERN



European AFS and Kerberos Conference, Alberto Pace, slide 3

#### **CERN Computing Infrastructure**

94,684 # of cores:

# of disks: 73,521

# of processors: 18,074

# of 10GB NICs: 2,917

# of 1GB NICs: 19,013

10,529 # of servers:

107,533 Disk space (TiB):

**RAM memory (TiB):** 328



AFS is here

















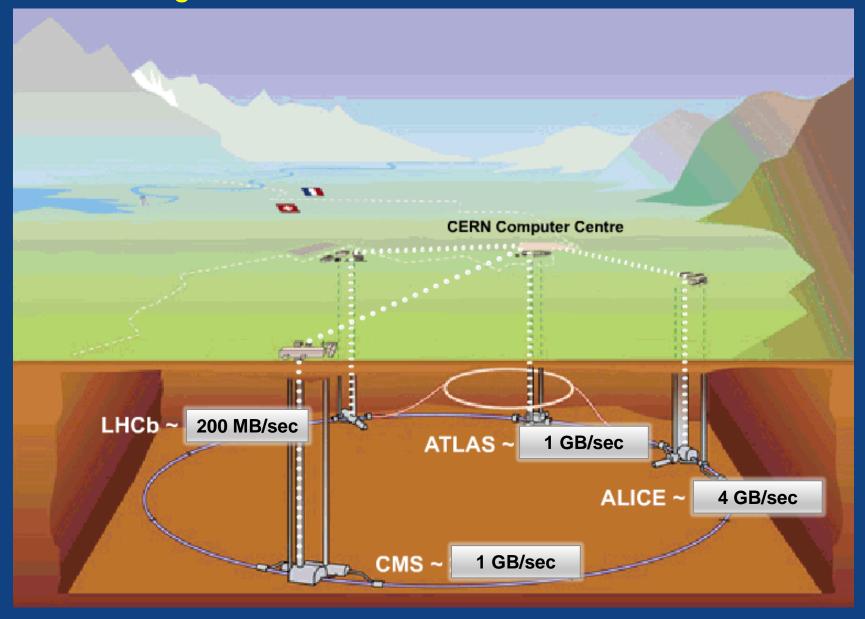
**Databases** 

Storage

Infrastructure

**CPUs** 

# At CERN: Acquisition, First pass reconstruction, Storage, Distribution, and Data Preservation



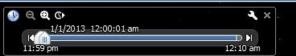
#### Only few words on AFS @ CERN

- Probably the oldest and most consolidated service of the IT department
- Repository of files and home directories for thousands of users
- Repository of files and documents for thousands of projects
- A global namespace, accessible worldwide, shared between desktops, interactive and batch servers
- AFS is in the dependency list of the LHC experiments
- A strategic, critical service for CERN.

#### In addition ...

- unprecedented usage growth
- excellent reliability and scalability
- running on low cost, commodity hardware
- What are we missing for the perfect online file system?

### Computing without borders



Running jobs: 246791

Transfer rate: 13.98 GiB/sec

## Welcome to the IT department,

# Welcome to the European AFS and Kerberos Conference

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