



# RECaS BARI



HTC, HPC, CLOUD, no matter what your flavours are. New users are welcome at ReCaS-Bari DataCenter!  
[www.recas-bari.it](http://www.recas-bari.it)

### The ReCaS Project

ReCaS-Bari is one of the four datacenters which have been upgraded through the ReCaS project in the South of Italy.

[www.pon-recas.it](http://www.pon-recas.it)

### The ReCaS-BariDataCenter

The ReCaS-Bari DataCenter has been built by the University of Bari "Aldo Moro" and the National Institute of Nuclear Physics (INFN) in the framework of the **ReCaS** project (PON Research and Competitiveness 2007-2013 Notice 254 / Ric ). It was completed in July 2015 and inaugurated on July 9, 2015. The aim of the ReCaS project was the upgrade of four DataCenter in Southern Italy, namely Catania, Cosenza, Naples and Bari. In fact in Bari the "Bari Computing Centre for Science (Bc<sup>2</sup>S)" was in operation since 2009: this DataCenter was built by INFN to support scientific computing needs of the ALICE and CMS experiments running at the Large Hadron Collider (LHC) at CERN in Geneva. The ReCaS-Bari DataCenter provides computing resources not only to the high energy physics experiments but also serves a wide variety of users by providing services that meet a variety of needs, sometimes conflicting with each other.

### Numbers

- 2 MW main power line
- 2 UPS 800 KW for 7 minutes each.
- Cooling system, cold air under the floor
- Auxiliary generator, 1500 kVA sustained
- Aspirating smoke detector (ASD)
- Infrastructure supervisor system
- 300 servers
- 9k cores
- 2,75k disks
- 4 PB disk space
- 1 Tape Library
- 2,5 PB tape space
- 2 network switches A/P
- 480 ports at 10Gb
- 10 Racks each row
- 6 rack rows. Up to 10
- 1893 known mac
- 707 VMs
- Up to 1GB/s GPFS write

### INDIGO-DataCloud



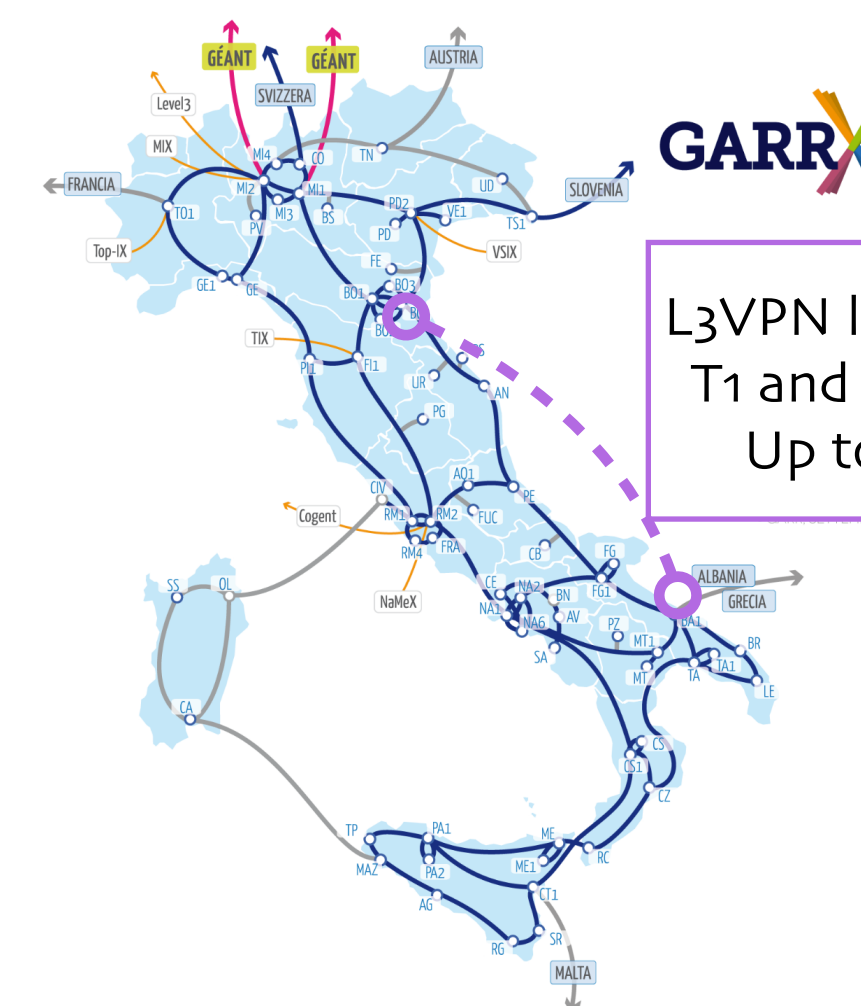
A subgroup of People working at ReCaS-Bari Datacenter are deeply involved in the INDIGO-DataCloud, a European funded development project, which aims at developing a data and computing platform targeted at scientific community [See poster in this booth for more details]. Following the Indigo first release ReCaS-Bari is now in the process of implementing the Indigo solutions to simplify and innovate the access to both computing and storage resources. Current users will soon experience a smarter way to access the resources hosted at ReCaS-Bari Datacenter and new users and communities will be attracted to exploit the new technologies and resources

### Admin tools

- OpenProject
- Zabbix
- Puppet
- HTCondor
- Torque/Maui
- GPFS
- Xrootd
- Foreman
- OpenStack
- TSM
- DESIGO insight
- Grafana
- TOSCA
- Mesos
- Marathon
- Graphite
- Indigo-DataCloud
- CEPH
- HUAWEI
- FortiGate
- Centos
- ScientificLinux
- Ubuntu
- KVM
- Libvirt
- Calico
- Bacula
- ucarp
- EMI
- IPMI

### Remote resources provider

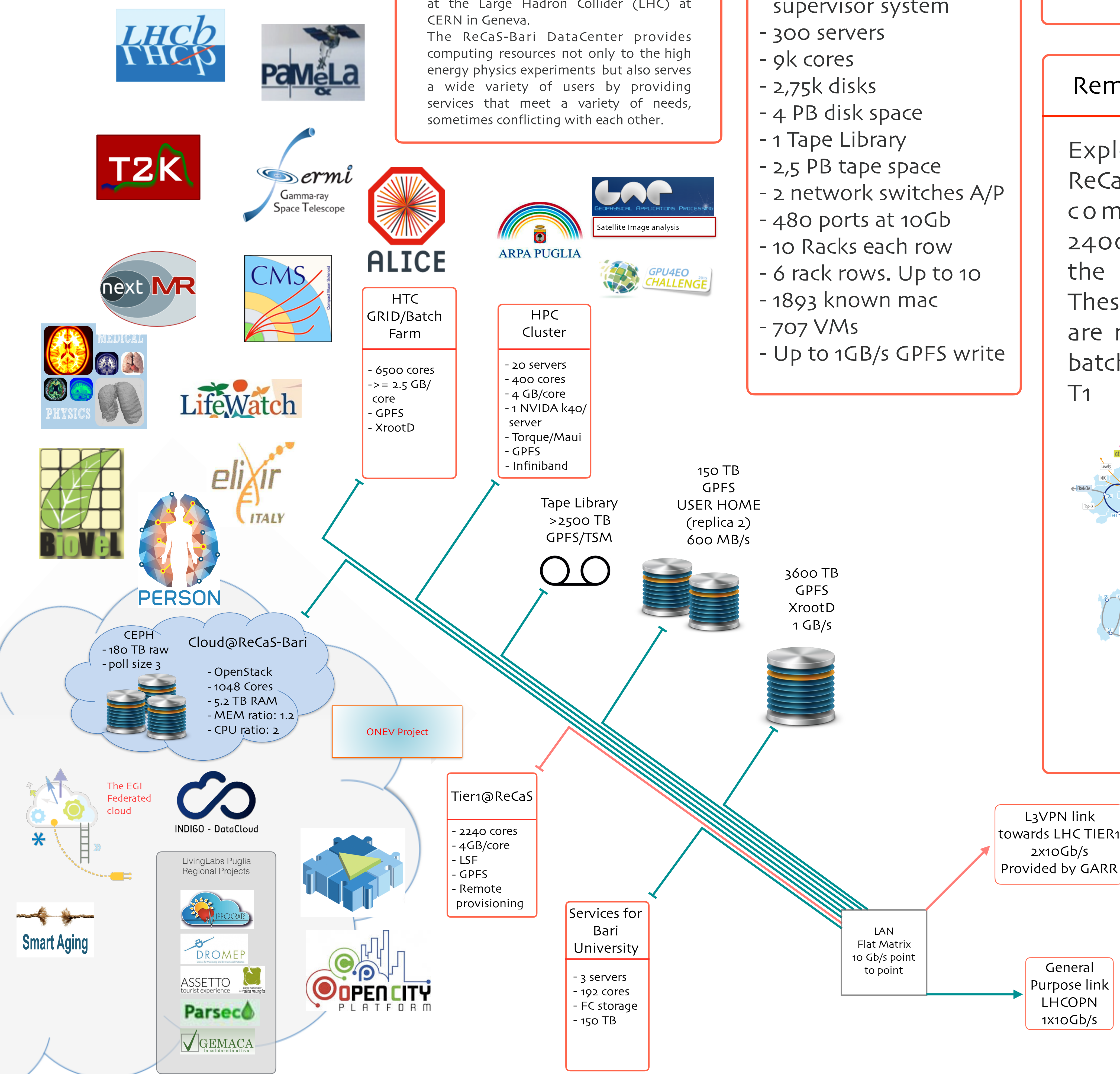
Exploiting a L3VPN link, ReCaS Bari provides physical computing resources, 2400core/~22k H506, to the Italian T1 LHC center. These computing resources are mainly used to execute batch jobs submitted to the T1



L3VPN link between T1 and ReCaS-Bari. Up to 20 Gb/s

### People working at ReCaS-Bari

- M. Antonacci
- Prof. R. Bellotti
- D. Diacono
- G. Donvito
- R. Gallitelli
- R. Gervasoni
- F. Giannuzzi
- A. Italiano
- Prof. G. P. Maggi
- A. Monaco
- S. Nicotri
- M. Perniola
- V. Spinoso
- S. Tangaro
- R. Valentini



### ReCaS-Bari Building

