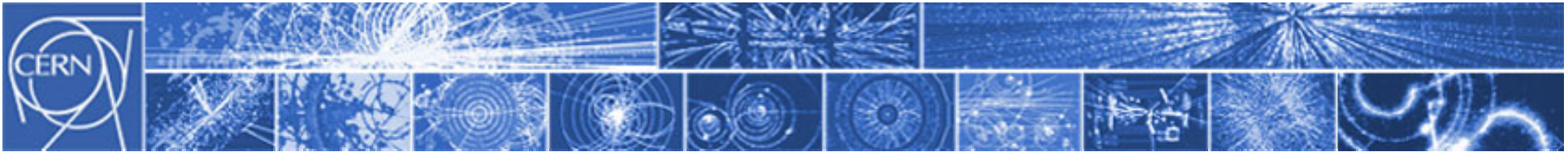




## CERN's partnership with IT industry

- Created in 2002
- Phase I: 2003-2005
- Phase II: 2006-2008
- Phase III: 2009-2011



- A science – industry partnership to drive R&D and innovation
- Started in 2002, now in second phase, phase 3 under preparation

***Motto: “you make it – we break it”***

- Evaluates state-of-the-art technologies in a very complex environment and improves them
- Test in a research environment today what will be used in industry tomorrow

**CERN**  
**openlab**  
[www.cern.ch/openlab](http://www.cern.ch/openlab)

PARTNERS

**hp**  
invent

**intel**

**ORACLE**

CONTRIBUTORS

**EDS**

**P-SECURE**

**STONESOFT**

- Two kinds of relationships:
  - Partners
    - Engagement for three years
    - Contribution 800 kCHF/year (500k€)
    - 50% in cash to fund personnel, 50% in-kind or services
  - Contributors
    - Engagement for one year
    - Contribution of 240kCHF (160k€)
    - 50% in cash as well



- Partners: Enterasys, HP, IBM, Intel & Oracle
- CERN opencluster: a major success
- Significant contributions to the LHC Computing Grid Project
  - 10Gb/s technology and long-distance networking
  - 64-bit technology, high-performance cluster
  - CFD calculations for experiments
  - Open software, compiler technology, tuning
  - Streaming for data-replication
  - Experience with complex data storage
- Many workshops, visits and partner events
- Participation and support in conferences

- Formal relation with EGEE
- Stronger emphasis on funding young scientists
- Main areas of collaboration:
  - Platform Competence Centre
  - Grid Interoperability Centre
  - Analysis and management of large complex network infrastructures
  - Security (completed in 2007)
  - Grid Monitoring
  - Marketing events
- Supported EGEE conference



**CERN**  
openlab  
[www.cern.ch/openlab](http://www.cern.ch/openlab)

PARTNERS



intel

ORACLE

CONTRIBUTORS



STONESOFT

- Covers 2009-2011
- Extensions under preparation with present partners
- Discussions on-going with possible new partners
- New topics
  - Multi-core, many core
  - Memory optimization
  - Power reduction
  - Control systems and PLC security
  - Extended Grid monitoring
  - Green IT – new data centre
- Siemens just became partner

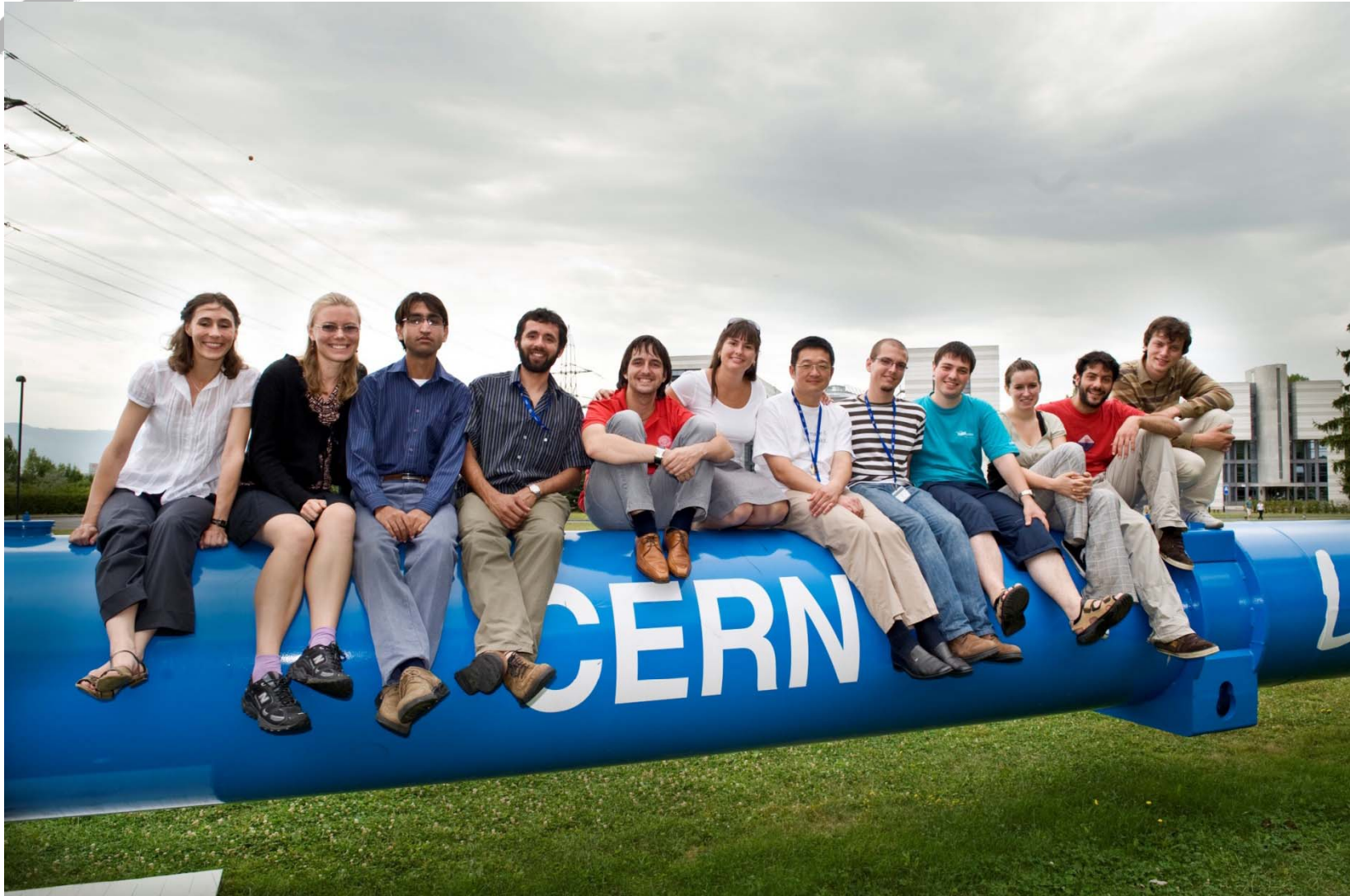


openlab is also about people





# openlab students



3 October 2008



# openlab students & supervisors





# openlab Board of Sponsors



- openlab has established it self as a reference
- Good balance between near-term and mid-term R&D
- Continuous stream of results due to long-term partnerships
- openlab has trained many young scientists
- LHC computing has profited directly
  
- A big “thank you” to our partners and contributors