# SuperB compunting mini-Workshop

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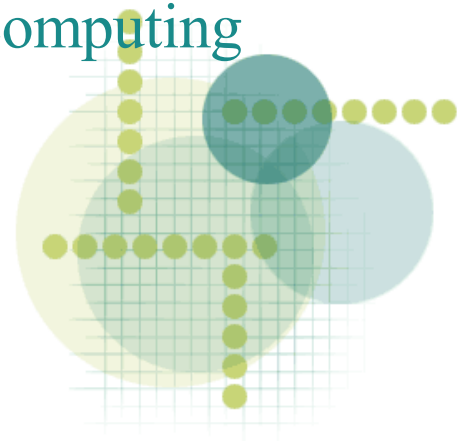
SLAC - 12/7/2007

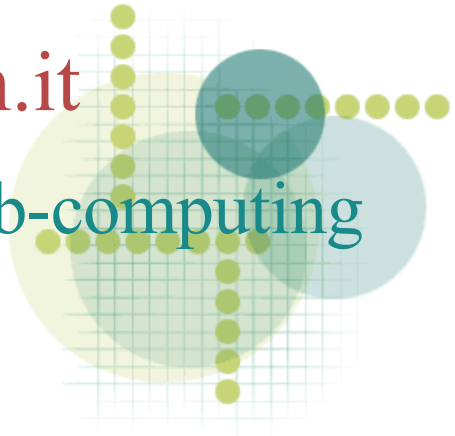
# Goals of the meeting

- The goals of the meetings are:
  - to analyze the **foreseen computing activities** of the SuperB detector and physics groups in the coming months
    - what do people need to do ?
  - to identify a minumum set of **simulation tools** that are needed to perform the studies for the TDR
    - what do people need ?
  - to start defining the main steps of a realistic **implementation plan** that includes also the setting up of the software and computing infrastructure
    - how do we proceed from here ?



# update on ongoing activities

- a SuperB proto-computing group has been formed a few months ago
- main activities so far:
  - make basic collaboration tools available to the SuperB group
    - eventually accessible via a common **AA infrastructure**
  - building a model for a Tier0 computing center
- mailing list: superb-computing@lists.infn.it
  - archive in https://lists.infn.it/sympa/arc/superb-computing
    - access requires self-registration

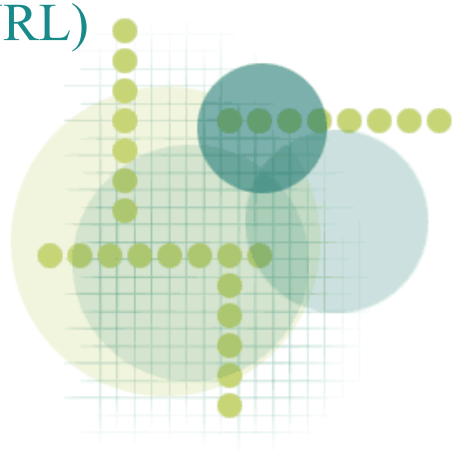


# collaborative tools (I)

- already deployed (and available to all SuperBabarians):
  - **Web site** (Drupal CMS) @ Pisa
    - http://www.pi.infn.it/SuperB/
  - **Mailing lists management** w/ archives, etc. (Sympa @ CNAF)
    - https://lists.infn.it
  - **Agenda and conference management** (Indico @ LNF)
    - http://agenda.infn.it
  - all these tools rely on their **own authentication mechanisms**
- migration to a common **INFN AA system** being developed
  - LDAP DB set up in Ferrara
  - first tests of getting Sympa users authenticated via LDAP DB successfully carried out (A. Donati, A. Gianoli et al.
    - see: http://cdsware.cern.ch/invenio/

# collaborative tools (II)

- coming soon:
  - **document archival tool** (Invenio: CERN digital library server)
    - to store documents, notes, etc.
    - recently adopted by ILC project too
    - see: http://cdsware.cern.ch/invenio/
- could also be available:
  - **Oracle Collaboration Suite** (document management, contact management, etc.)
    - https://ocstest2.lnf.infn.it (will change soon to final URL)



# Questions to detector and physics groups

- current and future **foreseen computing activities** for the TDR
  - estimate of the **computing resources** (CPU, disk and tape space) that may be needed in the coming months and, to the extent that it can be anticipated now, for the TDR preparation,
- **simulation and analysis SW infrastructure** (frameworks, tools, etc.), assuming that we take as a basis the current BaBar computing model:
- any other important aspect that deserves attention from the computing group
- anticipation of critical issues

# Critical issues

- **Access to Babar code** for non-Babarian
  - first discussion with Gregory and Hassan: process has started
- Is a fast smilation tool like Pravda sufficient for optimizing the detector geometry (e.g.: SVT)?
- How can we effectively use Babar simulation framework ? how can we manage possible code modifications ?
- BaBar framework is rather heavy while detector studies for the TDR needs light and portable tools with the detector model should be easily configurable

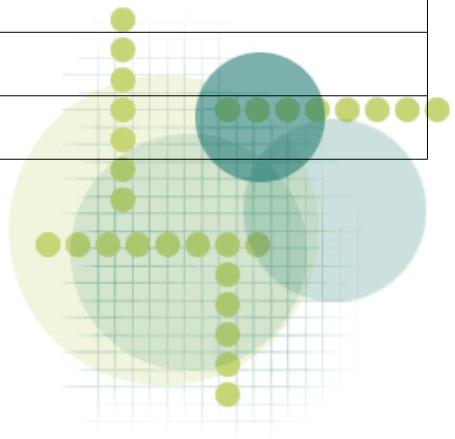
# Structuring the effort

- We need to define contact people in each sub-detector for implementing the foreseen simulation models
- We need to man key software positions; e.g.:
  - **framework architect(s)**
  - **fast simulation coordinator**
  - **detailed simulation coordinator**
- We need to identify who provides the basic computing services and how
  - **software repository and releases**
  - **collaborative tools**
  - **hardware infrastructure**

# Contact people (fast simulation)

- let's try to fill the table

| | Fast MC | | |
|---|---|---|---|
| | Institutions | Peoples | Comments |
| Det.Mach. I/F | Pisa, ... | | |
| Tracker | Pisa, ... | | |
| Drift chamber | LNF | | |
| PID | SLAC, ... | | |
| EMC | Perugia | | |
| IFR | Ferrara, Padova | | |
| Magnet, structure, etc. | ?? | | |



# Contact people (detailed simulation)

- let's try to fill the table

| | Detailed MC | | |
|---|---|---|---|
| | Institutions | Peoples | Comments |
| Det.Mach. I/F | Pisa, ... | | |
| Tracker | Pisa, ... | | |
| Drift chamber | LNF | | |
| PID | SLAC, ... | | |
| EMC | Perugia | | |
| IFR | Ferrara, Padova | | |
| Magnet, structure, etc. | ?? | | |