Welcome to the 7th Geant4 Collaboration Workshop

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Collaborators also from non-member institutions, including Budker Inst. of Physics IHEP Protvino MEPHI Moscow Pittsburg University
Geant4 History

- **End 1994: RD44 DRDC proposal**
  - four year project: Simulation for LHC experiments
  - test of the suitability of the OO approach
  - compare to Geant3 – also performance

- **Event and detector simulation for LHC is crucial:**
  - Design and optimize detectors
  - Prepare analysis and reconstruction algorithms
  - Understand backgrounds and detector effects during physics analysis

- **End 1998: first public production release**
  - structure of Collaboration defined in a MoU
  - validity of MoU: 2 years, was renewed once
Coming up now (end 2002):

- Revisit Collaboration Agreement
  - Implement User Requirement Groups
  - Clarify collaboration membership
  - Clarify the relation to the LHC Computing Grid Project
  - Maintain the excellent working relationship within the collaboration
  - Implement lessons learnt from 4 years of MoU
Geant4 is a Success!

- Well defined component architecture and software process
  - ensures seamless integration of new physics models
  - enables worldwide distributed development and maintenance
  - hopefully pays back in long-term maintenance

- Following the Geant4 OO experience, new software for the LHC experiments is developed in OO technology
The workshop

- 7th Geant4 workshop - More than 50 participants
- Key topics:
  - Comparisons with test-beam data
  - Physics processes
  - Graphics, frameworks and interactivity
  - Use of Geant4 for background radiation
  - Software process and documentation
  - Plans and goals
  - Collaboration Agreement
- A user workshop will follow in November
Issues to consider

- The communities involved will have to implement their respective requirements
  - a global work plan with clear objectives is required
  - CERN resources will be targeted towards the needs of LHC experiments
    - but the others will profit
- User support and mentoring will have to be increased
- Performance needs to be kept in mind