What are we here for ?

- Had review of our common software system
- One recommendation: Identify experts responsible for sub-systems (you) and organize regular meetings (this)
- There are many more recommendations to be worked on, and this meeting should help to do so coordinated and coherently
- Next steps: prioritize tasks, clearify technicalities, allocate resources, and prepare for collaboration-wide discussion at Manchester

Current List of Experts

• DAQ	Paul Dauncey
• Converter	Roman Poeschl
• SiW ECal	Roman Poeschl
• Tile HCal	Angela Lucaci
• TCMT	Guilherme Lima
• MOKKA	Gabriel Musat
• Sci ECal	N.N.
• Digital (HCal,MAPS)	N.N.
• Coordinator	Niels Meyer

As I See Things ...

- We have a software which grew together with the prototypes and the test-beam program
- The target is ILC, so also our software should aim there, not only at at the next step
- From the recommendations of the software review, I read valuable guidelines for the future evolution of our software with very few technical details - here is where experts come in
- The steering board ordered - we will have to propose a menu and present the bill

As I See Things ... (cont.)

- Several mistakes have been made in the past - should learn from these as soon as possible:
  - Often monolithic structures (e.g. cell numbering and geometry embedded in calibration)
  - Lots of unused synergies (e.g. Correction of ECal pedestal movements and HCal light cross-talk are very similar)
  - Lack of communication and cooperation
  - Little emphasis on using/contributing to ILC core SW
  - Almost no awareness that quick patches help in the moment but are often very expensive at later times

Selected Recommendations

- Common geometry reco / simulation
- User-friendly handling of conditions data (e.g. documentation, interfaces, DB cleaning, ...)
- Documentation - have doxygen and code examples, but these are good as reference only
- No availability or plan for:
  - Common tools (e.g. event display)
  - High-level analysis
  - ILC liaision

Before Manchester

- Revisit various standards and quasi-standards (e.g. cell identification)
- Develop scheme of geometry interfaces, preferably together with core software group
- Revisit current code and establish plan to break up monolithic structures
- Eventually common scheme for calibration & reconstruction as well (Sci-ECal needs reco anyhow)

Before Manchester (cont.)

- Finally, list and put together
  - Short-commings of the current software
  - Benefits of the proposed system
  - Resources necessary (people, time)
- This is a huge load of work, and we should organize ourselves to cope with it (e.g. software structure, but also group atmosphere)
- We are all more or less uncontent with the software as is. It will depend on our ideas and arguments how much better it can get

After Manchester

- Want to await discussions (both this group and Manchester), but there are things on the horizon we have to keep in mind already now:
  - New detectors and technical prototypes:
    Avoid re-inventing wheels
  - Is LCIO prepared for digital calorimeters?
    Integrate new detectors far earlier than at the test-beam
  - CALICE needs common analysis:
    Need to enthuse analysts to join and to write common code for common questions

I Have a Dream ...

... that not only code experts become aware that we still need huge efforts for our software in order not to compromize our physics goals

... that this meeting will become a forum where people can discuss their software ideas, find synergies, and in the end be more efficient

... that we all step back some time and have a look at the greater picture - usually it's worth it

... that we make this a combined effort, this became far to big to be handled alone