Welcome/Introduction

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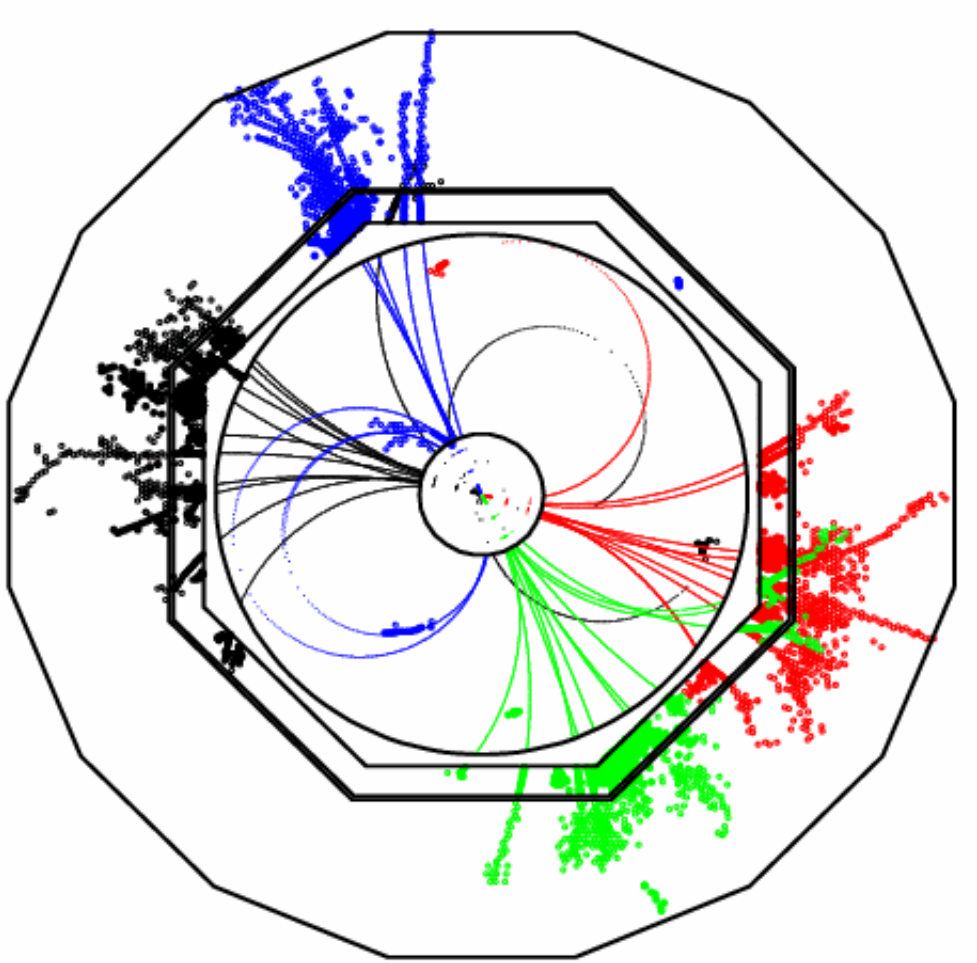

Before we start in earnest, a few words:

1. **ILD and the UK context**
2. **Relation to CALICE/LCFI**
3. **UK Opportunties**

Global Context : 4 become 3

ILC Detector Concepts:

- ★ Until recently ILC Detector Design work centred around 4 detector "concepts"
- ★ 3 of these concepts "optimised" for PFA Calorimetry SiD, LDC, GLD
- ★ Recently GLD and and LDC agreed to work towards joint detector concept

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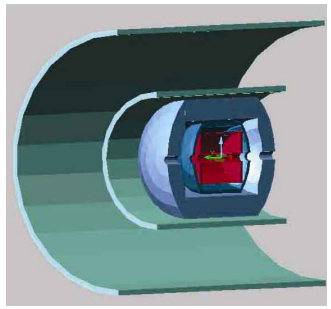
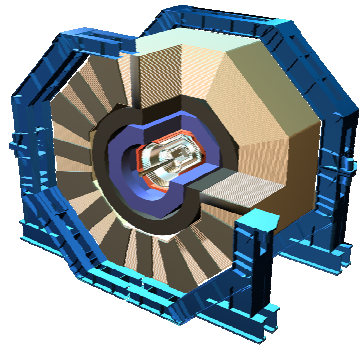
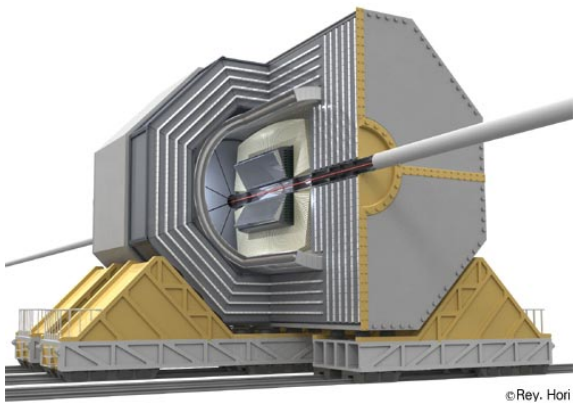


SiD : Silicon Detector



GLD : Global Large Detector



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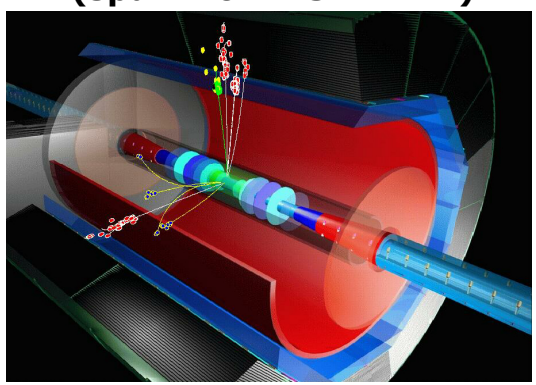
LDC : Large Detector Concept
(spawn of TESLA TDR)



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ILD

UK Context

- ★ **Currently main GLD/LDC effort:**
  - LDC: Germany, France + UK
  - GLD: Japan, Korea

  } ILD

- ★ **Ideal time for the UK to join ILD effort:**
  - **ILD is not fixed in stone – over the next year there will be major effort to choose/optimise parameters (size, B-field, etc.) based on ILC physics sensitivity**
  - **The simulation/software tools exist - UK has already made a major contribution here – build on this expertise + vast experience from LEP (ALEPH, DELPHI, OPAL)**
  - **Need to input realistic engineering details, e.g. power, cooling, DAQ, and cost; all will impact design.**
- ★ **Real opportunity for UK to play a leading role in these studies**
  - **Ultimately want to strengthen UK's position for time when real collaborations form in 201X ?**

Relation to CALICE, LCFI, LC-ABD

- ★ Need to consider UK involvement in ILD in light of existing (extremely successful) UK activities
  - Calice
  - LCFI
  - LC-ABD
  - Phenomenology
- ★ UK ILD involvement needs to build on this strength
  - In immediate future "unlikely" to get new funding
  - Difficult to start genuinely new activities
    - ⇨ focus current efforts towards ILD
  - Take care not to fragment/harm existing LCUK programme
- ★ ILD ↔Calice/LCFI
  - If handled carefully, ILD involvement should benefit ongoing R&D projects:
    - Place work in the larger context
    - Build closer ties between activities, e.g. vital for studies of physics sensitivities

UK Opportunities

Emphasis: build on areas of UK strength

- ★ **Vertex Detector Engineering** (Craig's talk)
  - UK expertise in design/construction of Silicon detectors
- ★ **Vertex Detector Reconstruction/Optimisation** (Sonja's talk)
  - UK already leading this through LCFI work
- ★ **Core Software** (Frank's talk)
  - Expertise + close link to reconstruction/physics
- ★ **Calorimetry** (Nigel's talk)
  - UK leading development of Particle Flow Calorimetry
  - UK developing promising technology MAPS
- ★ **Forward Region** (Covered by Ties)
  - UK has long standing interest in Forward Region (UCL)
  - "Hole" in ILD (particularly forward tracking)
- ★ **DAQ/Mechanical engineering** (Dave's talk)
  - Major UK contributions in CALICE/EUDET
- ★ **Physics Studies/Detector Optimisation** (Mark's talk)
  - Build on PFA and vertexing expertise

over to Ties…