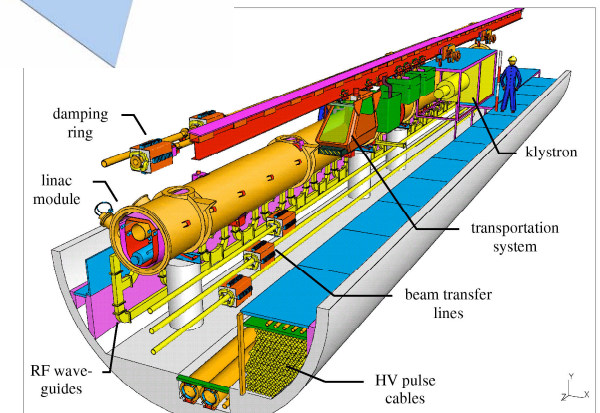
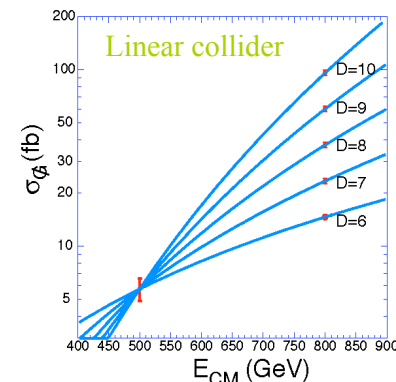
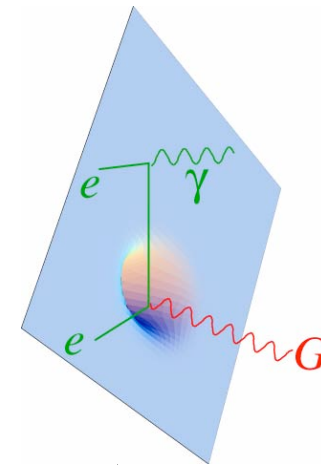
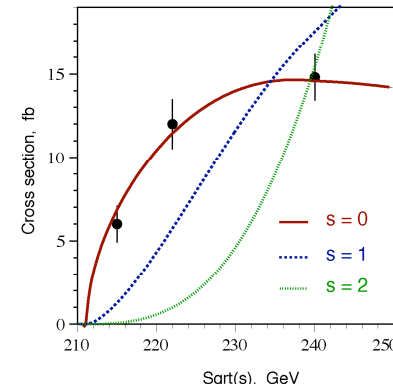
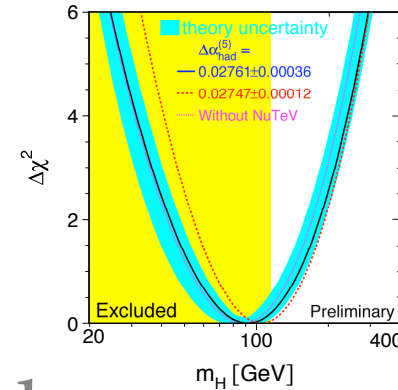


The International Linear Collider – fundamental Research on a worldwide Scale

Eckhard Elsen
DESY, Hamburg

International Linear Collider

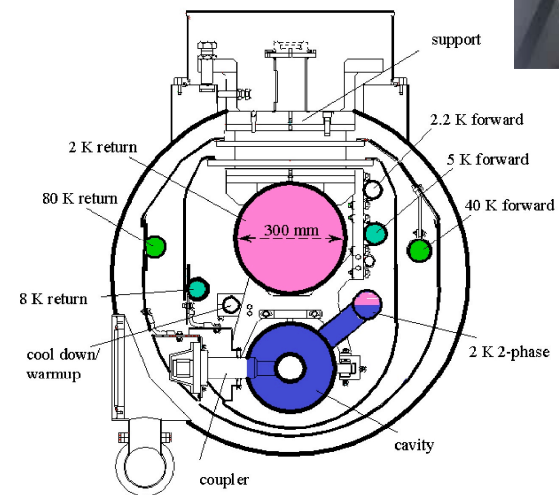
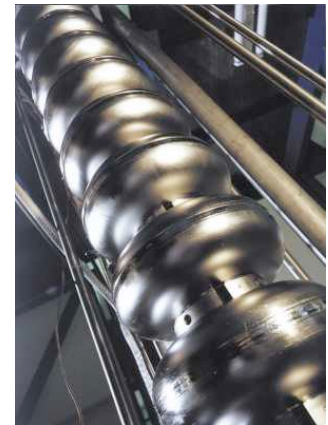
- Science Revolution
- (low mass) Higgs
- Understanding Electroweak Symmetry Breaking – Supersymmetry or otherwise
- Technology available
 - ~30 km Superconducting RF
- Multi billion € project



Superconducting RF

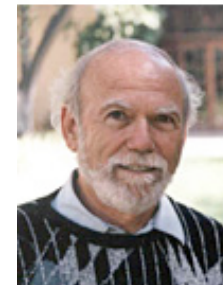
- Key technology advanced to maturity in Europe ($> 25 \text{ MV/m}$)
- Power effective acceleration
- Tremendous spin-offs
 - light sources (XFEL)
 - proton machines

TESLA



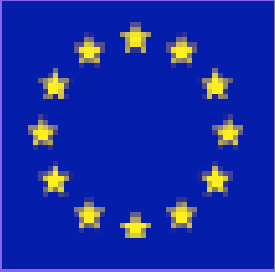
World Labs united

- ICFA endorses the recommendation of the ITRP expert panel to use SRF based on the TESLA technology for the ILC
- Global Design Team GDE under the leadership of B. Barish (CalTech) with regional directors



Barry Barish





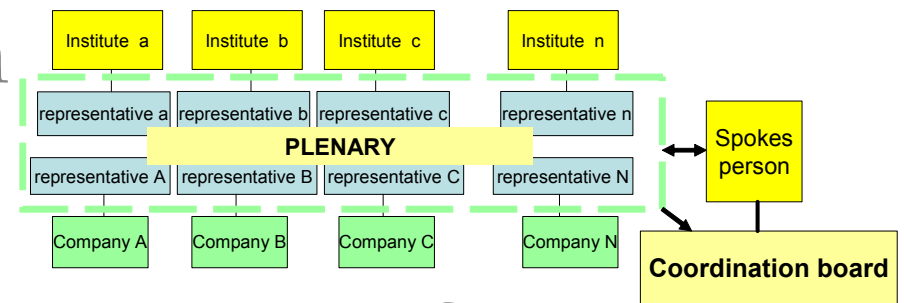
European Engagement

- CARE
- JRA SRF
- EUROT_eV
- Accelerator Research
- EUDET
- Detector Infrastructure
- ESFRI List of Opportunities
- ILC is listed as one of the Global Projects

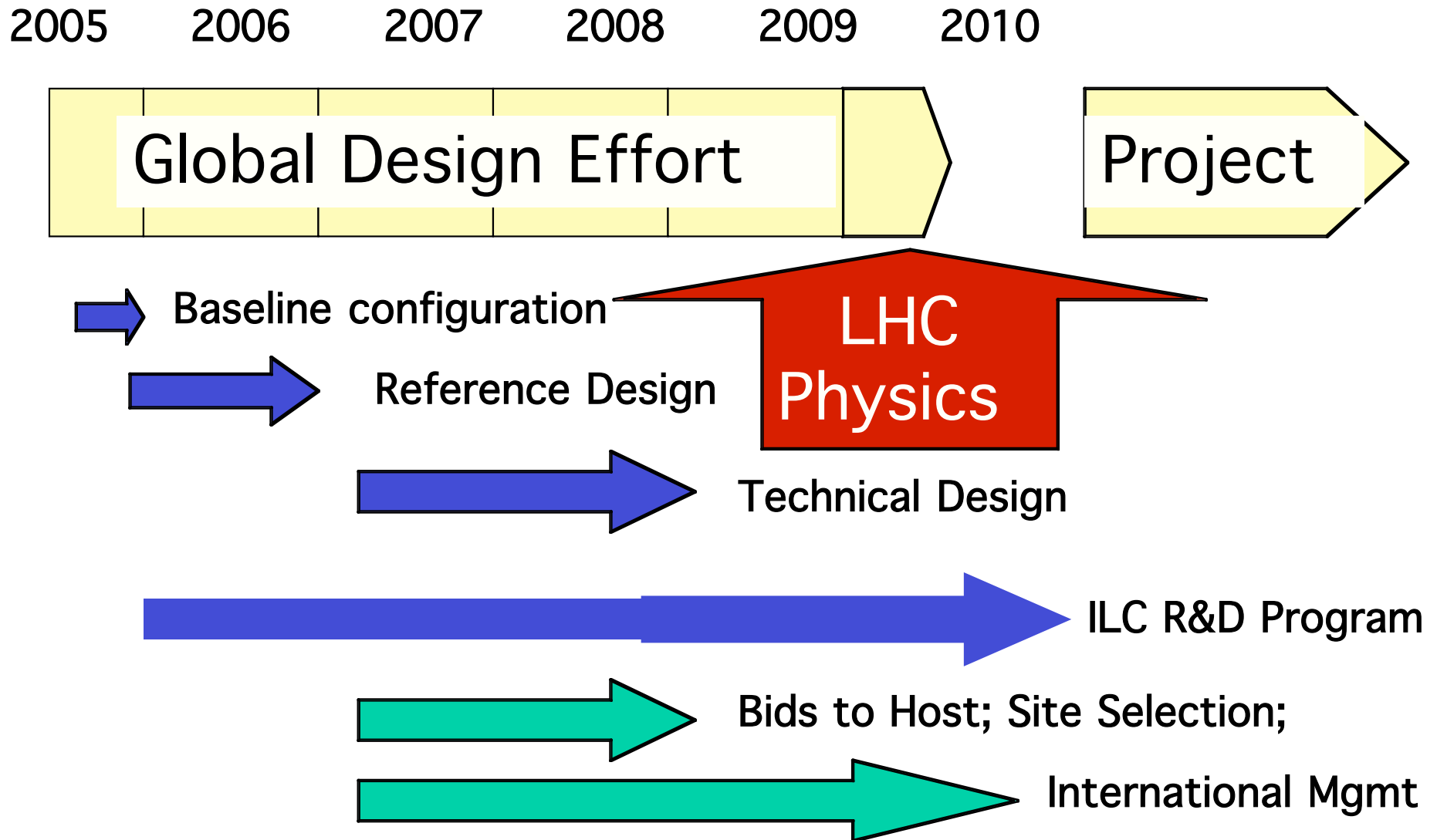


Industry Involvement

- Industry interest
 - Information exchange
 - Advanced technology
 - Prepare for large scale production
XFEL, ILC
- European Industry Forum
 - MoU just signed
 - Similar developments in Japan & US
("importing" technology)



The GDE Plan and Schedule



Summary

- ILC recognised as next large project of Particle Physics (OECD ministerial statement of 2004)
- Europe has a lead role in science and technology (TESLA technology)
- EU is structuring this process with I3s and Design Studies
- Technology process is well under way – Political process has to be aligned