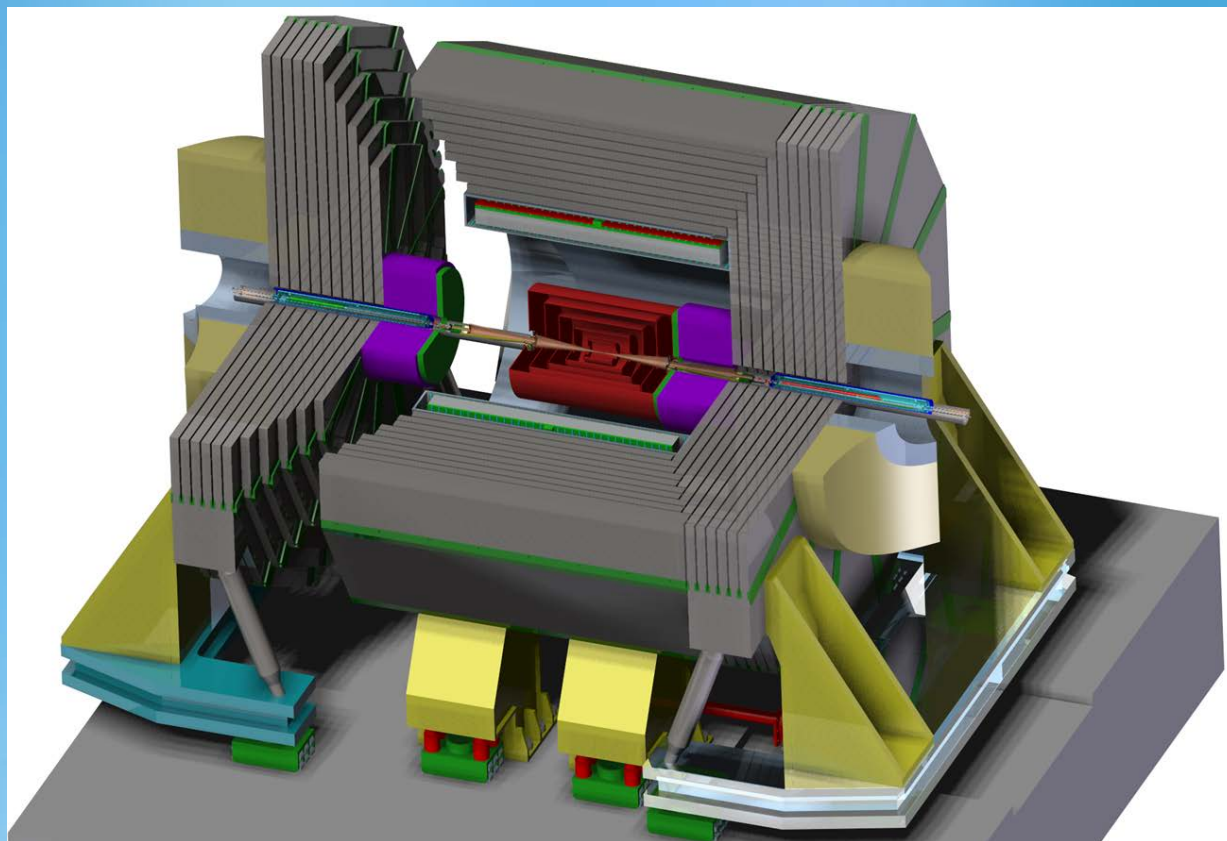


# The SiD Consortium and Detector – Introduction and Status

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# SiD/ILC Status

The long process of ILC project evaluation continues, with a decision expected in ~2018; more optimistic this meeting?

We have an accelerator design that can deliver the physics!  
But cost is always an issue..

A DoE/KEK exercise on SCRF cost reduction has started.

The physics case for the ILC remains very strong .

The “750 GeV” object appeared and disappeared!

Run 2 LHC results so far – no surprises...

# SiD/ILC Issues

## Towards an ILC Project in Japan

- Beyond the direct scientific case for the ILC – many other factors in play, e.g.
- Acceptance of the ILC by the **wider scientific community** in Japan
- ILC as a **major Japanese budget item**
- Potential role of a major ILC laboratory in Japan's **socio-economic decentralization** policy
- The **strategic importance** of the U.S. – Asian Pacific Rim alliance – recent trade pact – future ??
- How to make a **truly global project** fly.
- Staging – a new element in our discussions

# SiD/ILC Issues

Under the renewed U.S. – Japan Science and Technology agreement there is funding available for ILC !

Supports R&D and non-physicists (e.g. Engineers)

Requires “collaborative proposal(s)” involving U.S. and Japanese colleagues – this is a very positive aspect for SiD in collaboration building.

Discussions this week.



## FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



U. S. Department of Energy  
Office of Science  
High Energy Physics

U.S.-Japan Science and Technology Cooperation Program in  
High Energy Physics

Funding Opportunity Number: DE-FOA-0001699  
Announcement Type: Initial  
CFDA Number: 81.049

Issue Date:	11/15/2016
Letter of Intent Due Date:	Not Applicable
Pre-Application Due Date:	Not Applicable
Application Due Date:	01/15/2017 at 11:00 PM Eastern Time

# SiD/ILC Issues

- Discussions on going in **Europe** towards an **accord on the ILC**.
- **New European HEP Strategy** targeted for 2020 (goal for ILC decision to feed into this plan).
- Ongoing support at DESY.
- Funding for ILC during current period in UK. Future...
- Applications to US/DoE for renewed “base funding” for US Universities for 2017-19

# SiD/ILC Status

*Assuming some movement in 2018 towards a real ILC Project:*

2016 - 2018 Optimization of SiD (can only truly be done with serious resources after project approval) and production of significant pre-production prototypes.

2018 -2021 Technical Design Report.

2021 – 2022 Review of TDR

2023 – 2029 Construction of SiD

2029 – 2031 Commissioning and start of data taking.

# SiD Activities

- Weekly **Executive Committee** meetings
- Weekly **Optimization** meetings – lead by Jan Strube and now Aidan Robson! Very positive aspect of SiD! Very good to see the high level of student participation!
- Participation in **ALCC** meetings representing SiD Consortium.
- Participation in bi-weekly **LCCPDeb** meetings.
- Participation in MDI/CFS Working Group – increasingly difficult with lack of support.



# SiD at LCWS 2016

- SiD Plenary talk – Aidan ✓
- Zpole/Calibration discussion
- Parallel session talks
  - Anne – muon background, pairs
  - Amanda – ECal
  - Jan – LCIO/Julia; Z pole running
  - Bruce – Beam Cal – irradiation; simulation studies
  - Tim – Triple Higgs Coupling
  - Bogdan – SiD Sim/Reco
  - AW – PDAP: SiD Review talk
- PDAP Review of SiD (Thursday – closed)
- SiD Dinner – Thursday evening – all invited!



# At this SiD meeting

09:00	<b>Welcome/Introduction/SiD Status (Andy White)</b> <i>MALIOS, 185.186</i>	09:00 - 09:15
	<b>SiD Optimization Overview (Jan Strube)</b> <i>MALIOS, 185.186</i>	09:15 - 09:30
	<b>SiD Optimization reports #1 ECal simulation/Test beam analysis (Amanda Steinhebel)</b> <i>MALIOS, 185.186</i>	09:30 - 09:45
	<b>SiD Optimization reports #1 Simulation status (Aidan Robson)</b> <i>MALIOS, 185.186</i>	09:45 - 10:00
10:00	<b>SiD Optimization reports #1 HCal simulation (Andy White)</b> <i>MALIOS, 185.186</i>	10:00 - 10:15
	<b>SiD Optimization reports #2 Muon background, pairs study (Anne Schuetz)</b> <i>MALIOS, 185.186</i>	10:40 - 10:55
11:00	<b>SiD Optimization reports #2 FCal studies (Bruce Schumm)</b> <i>MALIOS, 185.186</i>	10:55 - 11:10
	<b>SiD Plans for 2017 - discussion</b> <i>MALIOS, 185.186</i>	11:10 - 11:30
	<b>SiD IB Meeting (Phil Burrows)</b> <i>MALIOS, 185.186</i>	11:30 - 12:00
12:00		

# SiD Going Forward

- We have an excellent detector design that can deliver great physics! We continue to refine/optimize the design – ideas welcome!
- The full exploration of Higgs physics and the  $\sim 1$  TeV physics region is best done at ILC with SiD!
- We have been/still are in a difficult support/project situation...
- ...but, let's hang in there and continue to improve SiD in anticipation of the future ILC program !!