

# SID News

08/October/2014

Marcel Stanitzki



# Welcome To Belgrade

- We've already made the news
- Two plenary SiD Talks
  - Bruce Schumm on SiD general (Monday)
  - Jan Strube on Optimization (Thursday)
- Also several SiD talks in the parallel sessions

Nikolić: EU integrations are a priority

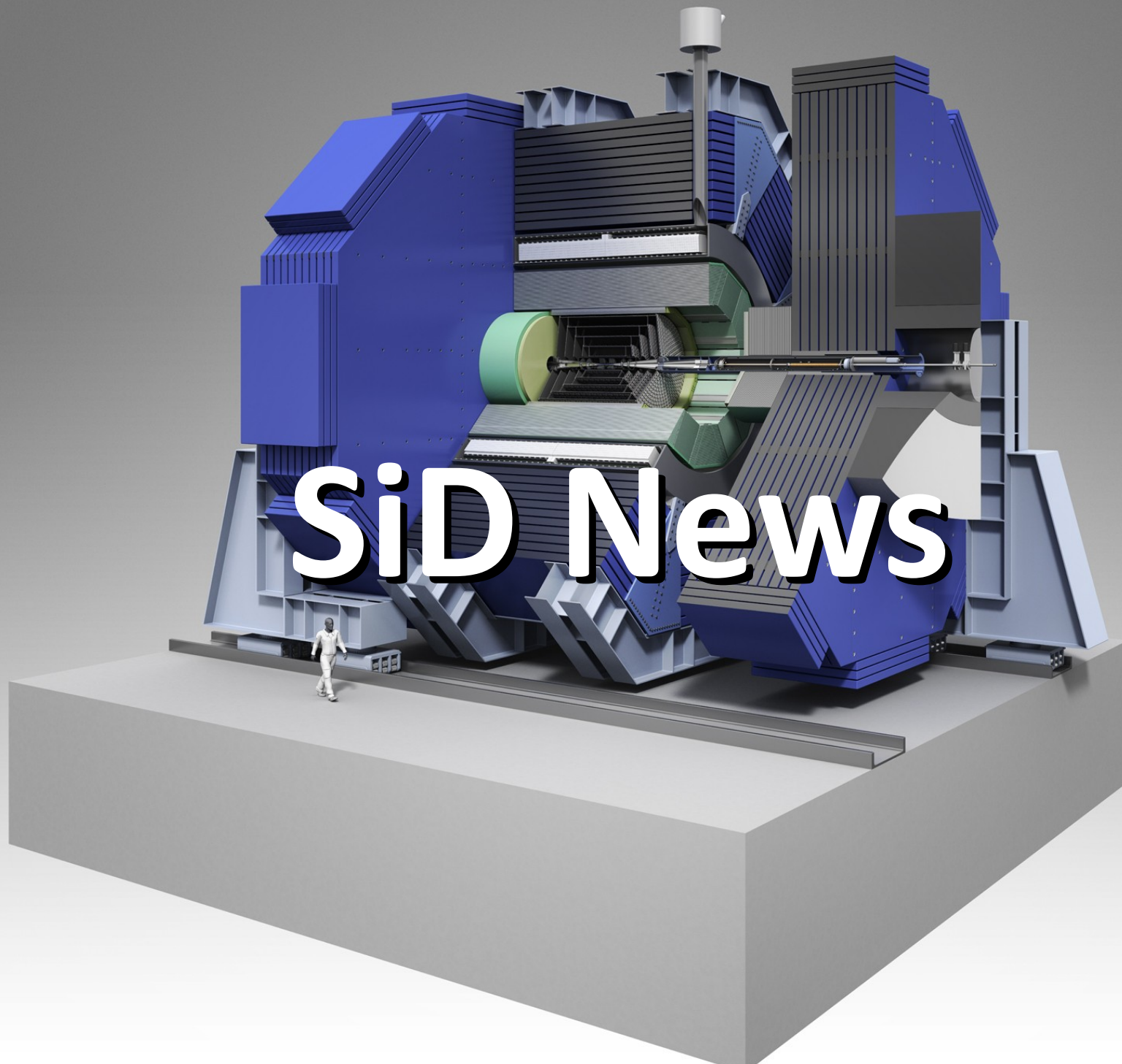
*Mon, 10/06/2014 - 14:20 -- MRS*



Serbian President Tomislav Nikolić has opened in Belgrade one of the world's most eminent science conferences in the field of high energy physics. On that occasion, he said that our scientists had already given an immense contribution to Serbia's EU integrations, which is our priority. They have been firmly integrated among European institutions, which is why Europe has entrusted to them to host this

world's conference, he stressed, opening the gathering, entitled LCWS14 (Linear Collider Workshop 2014). Nikolić said that event improved Serbia's international reputation, especially in the field of science. He greeted the idea connecting three continents, Europe, Asia and America, and showing that the world is inseparable and that scientific thought connects people for the purpose of the welfare and progress of humankind. LCWS is an annual conference gathering around 200 most eminent physicists from all over the world, who take part in the research of high energy fields.







# SiD Meeting in Tokyo



- First SiD meeting in Asia (2<sup>nd</sup> - 3<sup>rd</sup> September)
  - Kindly hosted by Hiro Aihara and the University of Tokyo
  - Strong Japanese participation
  - Very productive discussions
  - See Agenda [here](#)





We very much enjoyed the visit

# Touring Kitakami Mountains

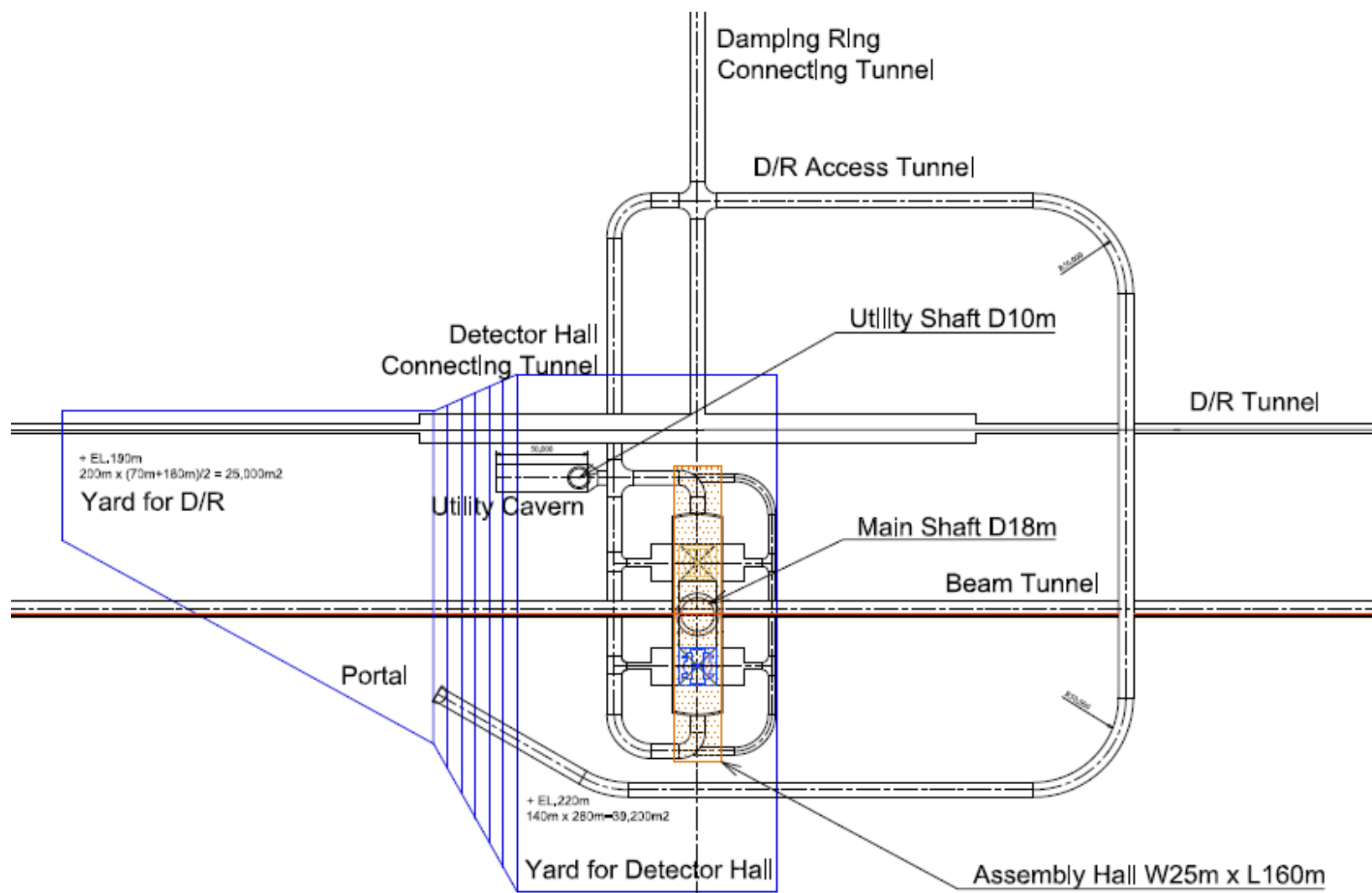




# Change Requests

- Tom Markiewicz is our rep on the change management board
- Two requests affecting the detectors
  - Common L\*
  - Change to Vertical Shaft access scheme
- Tom will give a short summary today

# Access Scheme



Hybrid A' will be the one, that will now be studied en detail

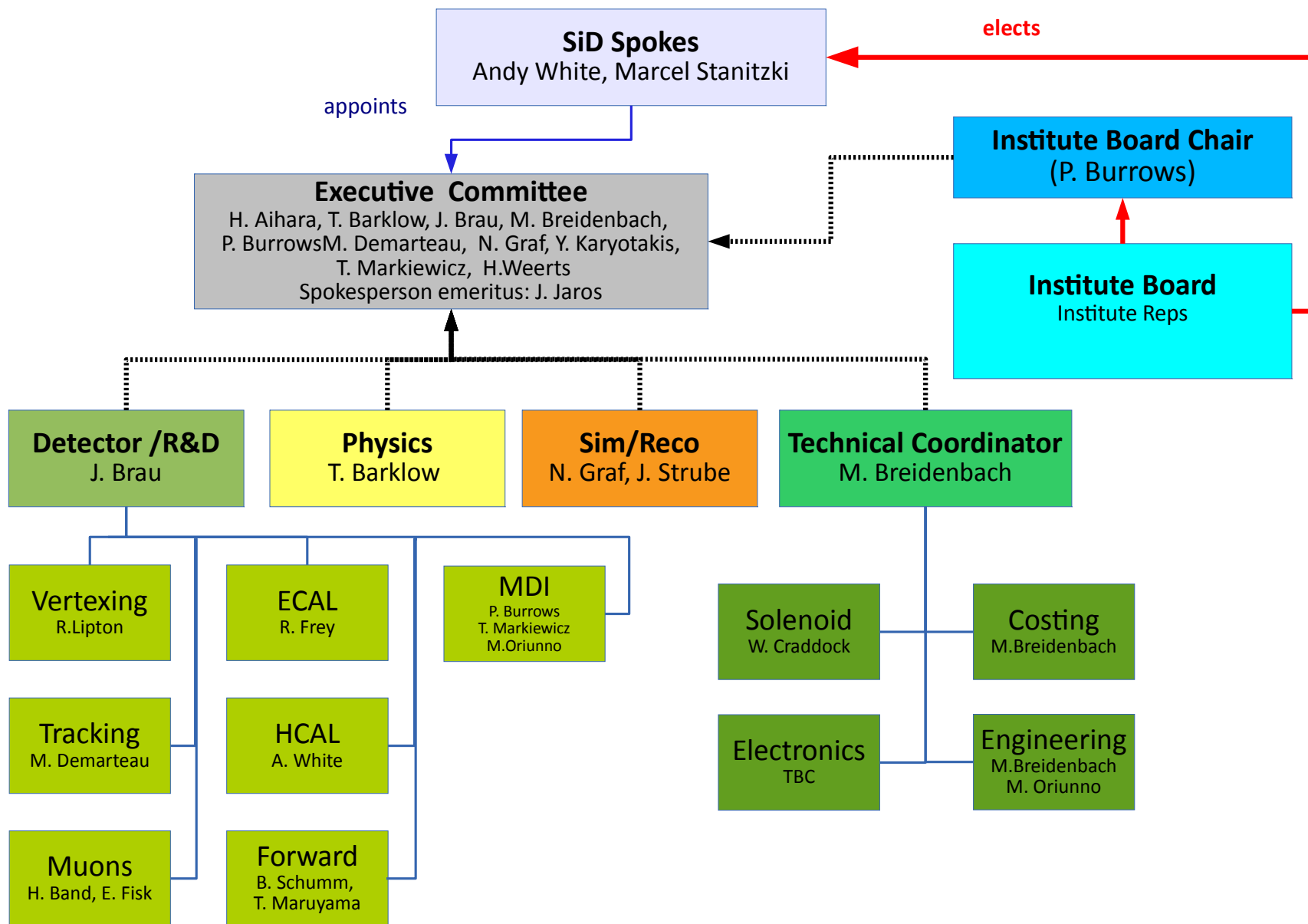




# SiD IB Meeting

- SiD Consortium is growing
  - ~ 25 groups signed on already
- SiD has its first Institute Board meeting last Monday
  - 20 groups were present
- Main topics
  - Discussion of the byelaws
  - Election of an IB chair
- New IB chair
  - Phil Burrows (Oxford), unanimous vote
- Having the IB established, the consortium is now “operational”
  - Voting on membership
  - In charge of the Byelaws

# Organigram – September 2014





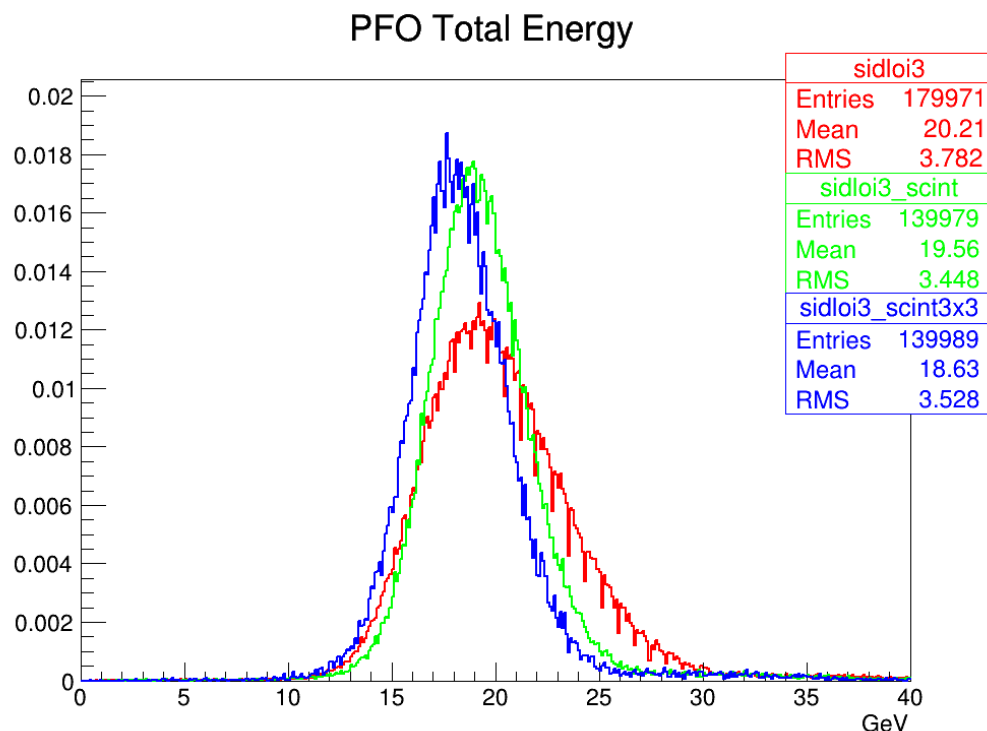


# Detector Optimization

- The current SiD has been optimized with a cost-constraint in mind
- Detector has performed very well in all benchmarks
  - That doesn't mean we can lean back ...
- Now's a window of opportunity to revisit a few choices
- Will focus on
  - Tracker design
  - ECAL depth
  - HCAL technology and depth
- Weekly Optimization meetings

# One of the big questions

- One big question from DBD days
  - PFA performance of RPC DHCAL vs. Scintillator AHCAL
- Understanding the reasons
- Current status
  - Main reason is not PandoraPFA
  - Strong angular dependence of RPC response in simulation
  - RPC response modeling is “suboptimal”
  - Calibration can be improved as well





- This and more in Jan's Optimization talk on Thursday
  - 0900-1045 (Jan has loads to say)
  - He promised to be controversial
- Quick update by Jan today

- The Project is getting more real
- This also means we're getting real questions
- How much computing do we need
- What is our raw data rate
- Online reconstruction vs. Offline reconstruction
- Jan and Marcel produced a first set of numbers
  - Thanks to the help of Akiya Miyamoto
  - And discussions with Jim and Andy
- See Jan's Talk



- Sakue Yamada is chairing this WG
- SiD reps
  - Marty Breidenbach & Marcel Stanitzki
- Current task
  - Estimation of the manpower needs during construction
- First draft has been made by Marty
  - Currently being discussed
- As usual ILD has used a different approach to derive these numbers

# On Workshops

- LCC is discussing the Workshop Format
  - We would like to discuss LC meeting in Asia to be held in spring of 2015.
  - There are a few suggestions about in what form we would like to have this meeting - a traditional LC workshop, or an omnibus of multiple meetings (ILD, SiD, CALICE, ATF, etc.). We would also like to come up with the date if possible.
- Please send your comments to me
  - I'll collect them and send them to LCC

Plans are worthless, but planning is everything  
Dwight D. Eisenhower

A detailed 3D cutaway rendering of the SI-D detector, a large-scale particle physics experiment. The structure is primarily blue and grey, with a central cylindrical component highlighted in green. A small human figure is visible at the base for scale. The text 'SiD Plans' and 'See Andy's Talk' is overlaid in large white font.

# SiD Plans

## See Andy's Talk

No plan survives contact with the enemy  
Hellmuth von Moltke





# Staying in touch

- Webpage: <http://silicondetector.org>
- We have a new *sid-general* mailing list
- Easy to subscribe to
  - Send a mail with `subscribe sid-all John Doe` in the body to [listserv@slac.stanford.edu](mailto:listserv@slac.stanford.edu)
  - <https://listserv.slac.stanford.edu/cgi-bin/wa?SUBED1=SID-ALL&A=1>
- List will be used for
  - Meeting and Workshop announcements
  - General SiD news
- SiD Newsletter
  - By Email and available via the [Webpages](#)



# Joining the consortium

- SiD is open to institutions and individuals
- Interested
  - Contact the spokespeople (Andy White & Marcel Stanitzki)
  - Or the Institute Board Chair (Phil Burrows)
- To formally apply, please send an email to the Chair of the Institute Board
  - The IB will approve the application

# Next SiD Workshop

- January 12<sup>th</sup>-15<sup>th</sup>, 2015
  - At SLAC
- Everybody is welcome
- Hot topics
  - Detector optimization
  - MDI/CFS
  - Funding
- Discussion of having a dedicated MDI/CFS meeting attached to the Workshop



# Summary

- SiD is making the next step towards a TDR
  - Adopting a more “formal” structure
  - Strong support from P5 and European Strategy
  - Growing R&D activities
- SiD remains open for new groups and new ideas
  - Technology options
  - New approaches
  - Detector baseline not cast in stone