



Oshu City 2014

ILD Meeting Oshu City

Introduction and Charge
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ILD @ OSHU

Many thanks to the Tohoku group to organise the meeting here in Oshu City!

Many thanks to the local authorities for the overwhelming welcome and support!





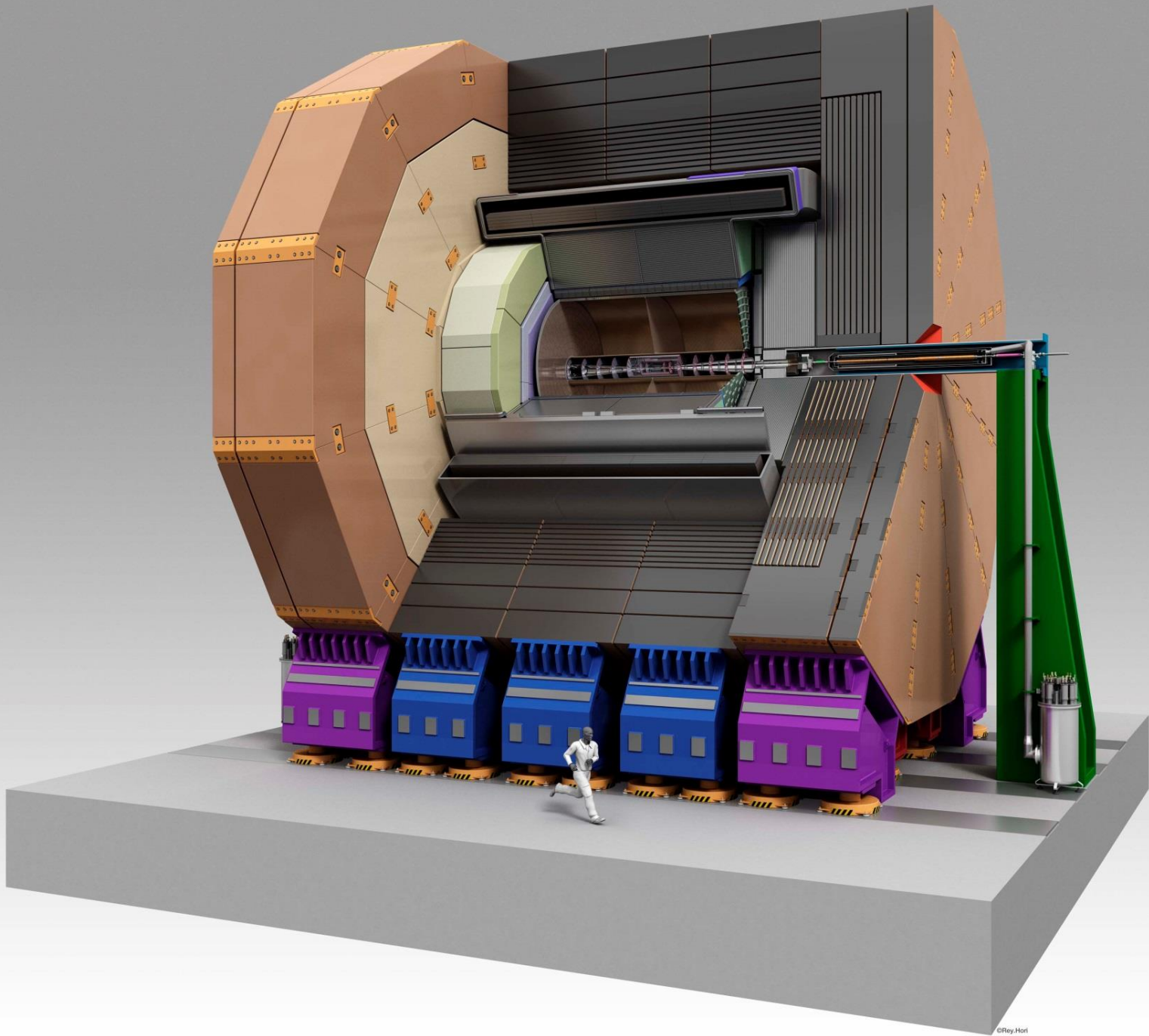


ILCで大原を自慢の町に//
一夢と・希望と・未来をここに〜

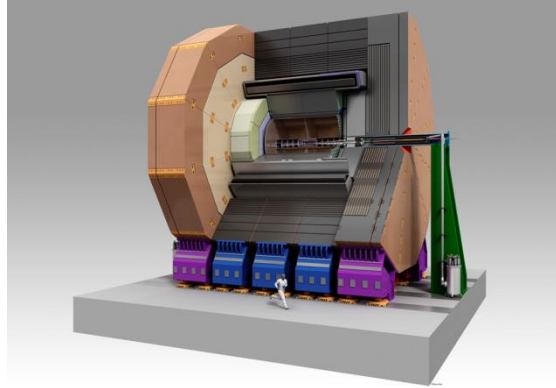


We support the International-
Linear Collider Project.

ILC
International Linear Collider
国際線形衝突加速器



Goals



Re-invent ILD “the detector”

Put ILD up against the physics agenda of the ILC: how are we doing?

Are we doing the right things?

Are we doing things right?

Re-invent ILD “the organisation”

Make the physics case through realistic physics studies

Goals



Cracow
2013

A bit less than one year since the Cracow meeting

At Cracow:

- Started the re-optimization effort for ILD
- Started the re-organisation of ILD

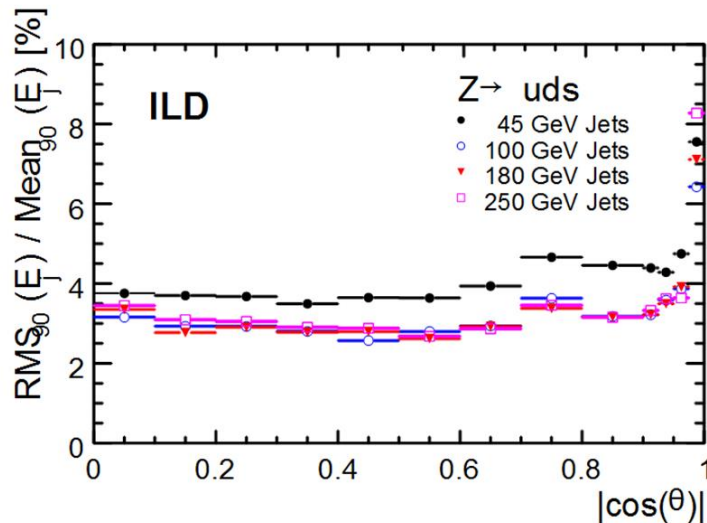
- Take stock: Where are we today
- Review our choices and steps taken so far
- Define the next steps

Optimization

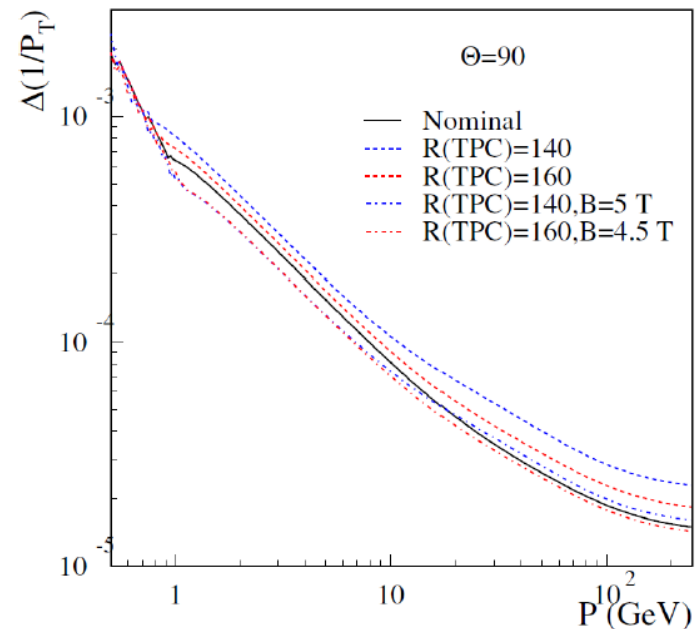
Regular ILD optimization meetings once a month

- Have looked at most systems in ILD
- Have a more complete picture now where we are, what are possible directions to move forward

Start from an excellent and optimized system: particle flow performance



Tracking performance



Costs

System	Option	Cost [MILCU]	Mean Cost [MILCU]
Vertex			3.4
Silicon tracking	inner	2.3	2.3
Silicon tracking	outer	21.0	21.0
TPC		35.9	35.9
ECAL			116.9
	SiECAL	157.7	
	ScECAL	74.0	
HCAL			44.9
	AHCAL	44.9	
	SDHCAL	44.8	
FCAL		8.1	8.1
Muon		6.5	6.5
Coil, incl ancillaries		38.0	38.0
Yoke		95.0	95.0
Beamtube		0.5	0.5
Global DAQ		1.1	1.1
Integration		1.5	1.5
Global Transportation		12.0	12.0
Sum ILD			391.8

Cost is a major concern:

Can we justify the costs of
ILD?

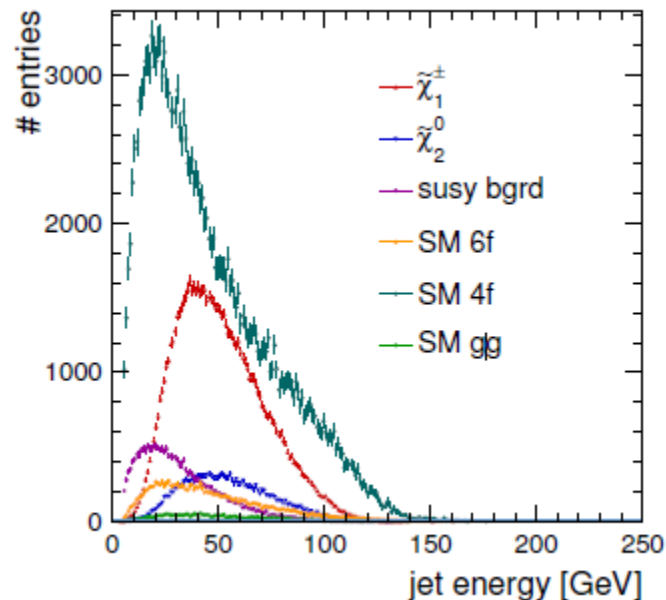
But cost is not everything
(ILD is \ll 10% of ILC)

Connection to physics

At Cracow and Tokyo 2013:

Need to improve the connection between physics benchmarks / physics performance and detector performance

Need to make convincing arguments that our performance goals are justified by physics.



Questions we have asked the groups

1. Do you have reasons to change your performance requirements? Can you justify the goals we have defined in the TDR?
2. Are we in a position to meet the performance requirements? What is missing to make a proposal? If we have more than one technology to choose from, what do we need to do to prepare a decision?

Technology Choice

ILD has always been very open for technological options.

- Tight connection between ILD and the R&D groups
- Strong support from ILD for R&D in different directions.

ILD has no plans to make a technology choice now. We continue to be open for different technological options, and we continue to support this as ILD baseline.

As ILD however we need to start a discussion on how we eventually want to make a technology choice. We should start this discussion now. We should agree among us on criteria and rules. We should now make sure that we push our options to a point where we can make a decision in a few years time.

Structure of the Meeting

Day 1: Overview, general situation, political situation in Japan.

Critical review on ILD from an “outsider”: Many thanks to Marcel to take on this charge!

Afternoon: Review of the optimization, discussion

Day 2: Where do we stand:

R&D

Physics

Day 3: Wrap up, overflow,

MDI, Software,

Discussion

ILD Organisation

Step 1: Define ILD membership

Call for groups to sign “Statement of participation” in ILD

No financial etc commitment,
but “formal” expression of the intent to participate in ILD.

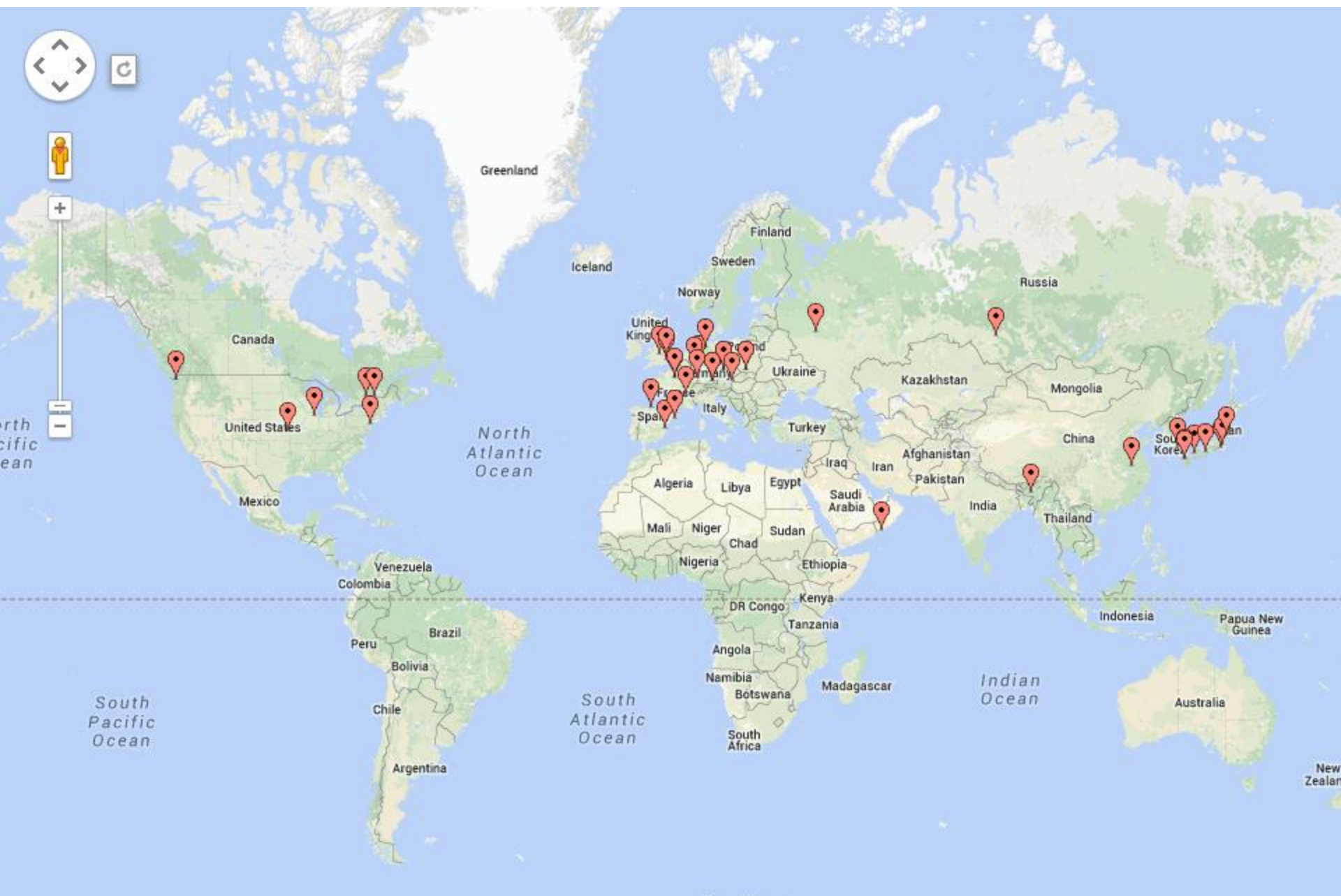
So far 54 Institutes have signed up: great success in my view

Step 2: ILD institute assembly elects a chair

Defines the next step of the ILD structure
Setup a procedure to move towards election of ILD leadership

Tomorrow evening: First session of the ILD institute assembly.

One vote per institute, no proxy votes
You are welcome to participate as an observer, but we ask for one delegate per institute to be there.



IA: Country Distribution

Total

