

ILD High Level Reconstruction

Workshop 2015

DESY

Ties Behnke



Research Centers: **18**

Employees: **~ 37 000**

Funding (Bill. Euro) **~ 4**

Research Areas:

Health

Environment and Earth

Energy

Traffic and Space

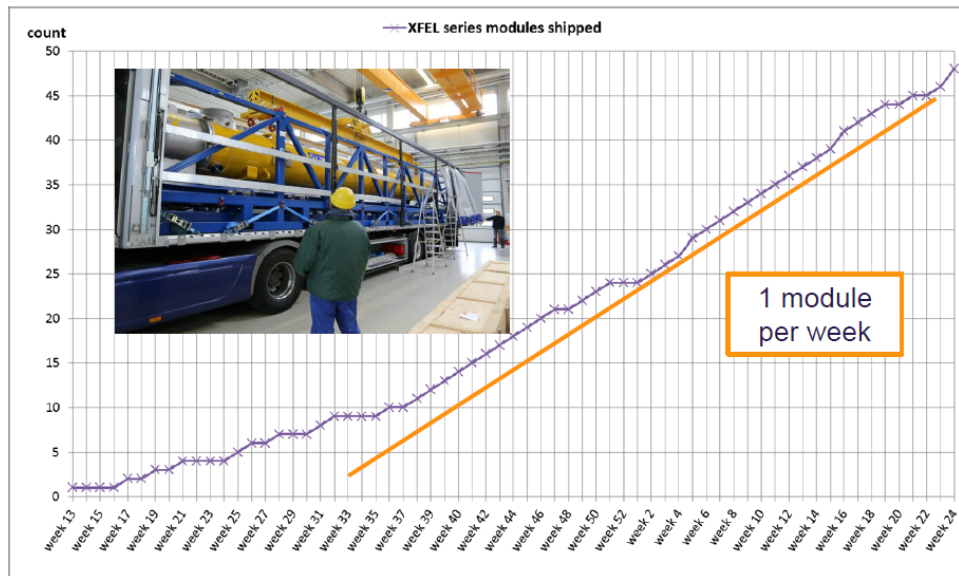
Structure of Matter

Key Technology

Since we are at DESY...

European free electron
laser:

Status of Module production



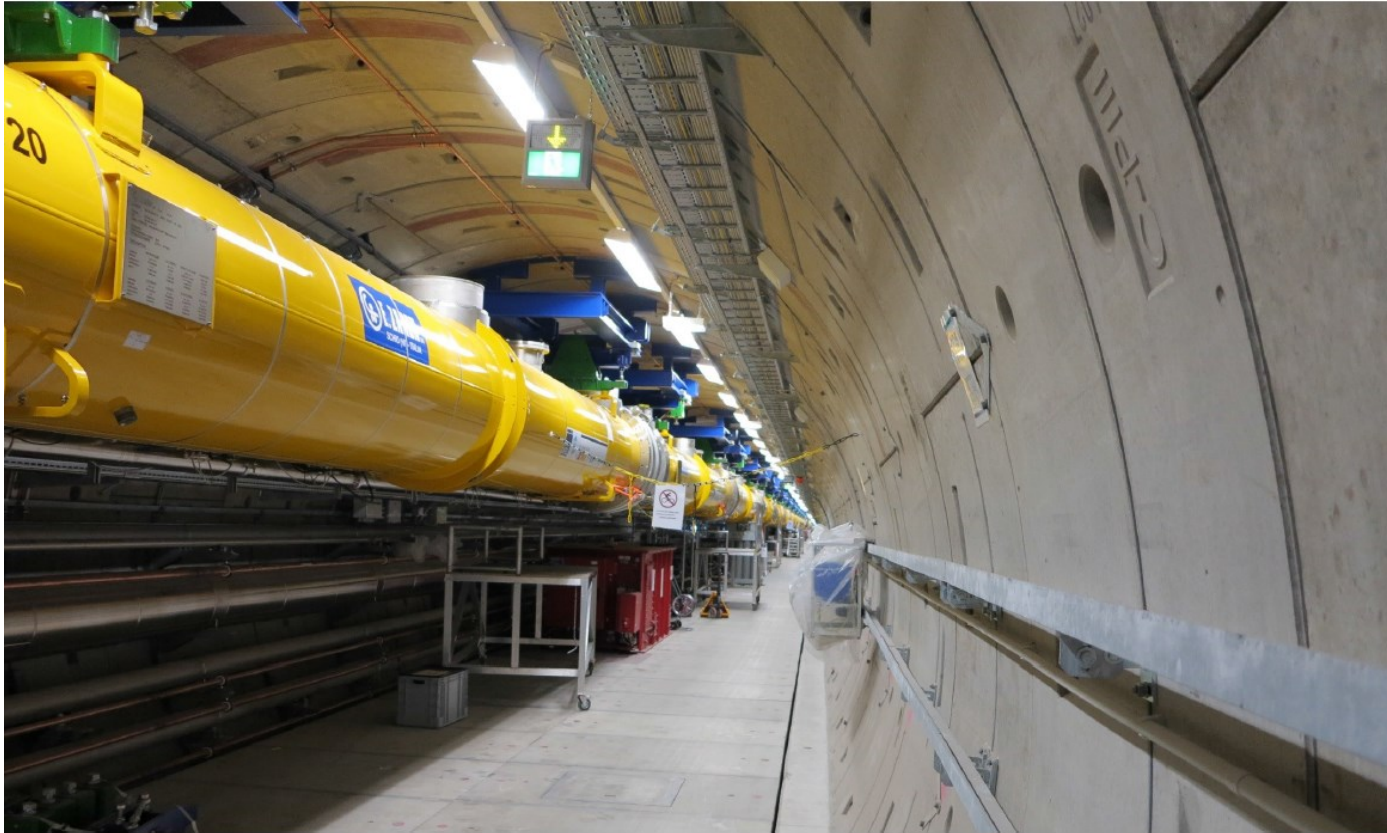
The nominal rate
of 1 module per
week has been
reached with
XM12
(24/09/2014).

Production in 2015 delivered 21 modules in the first 87 working days!!!

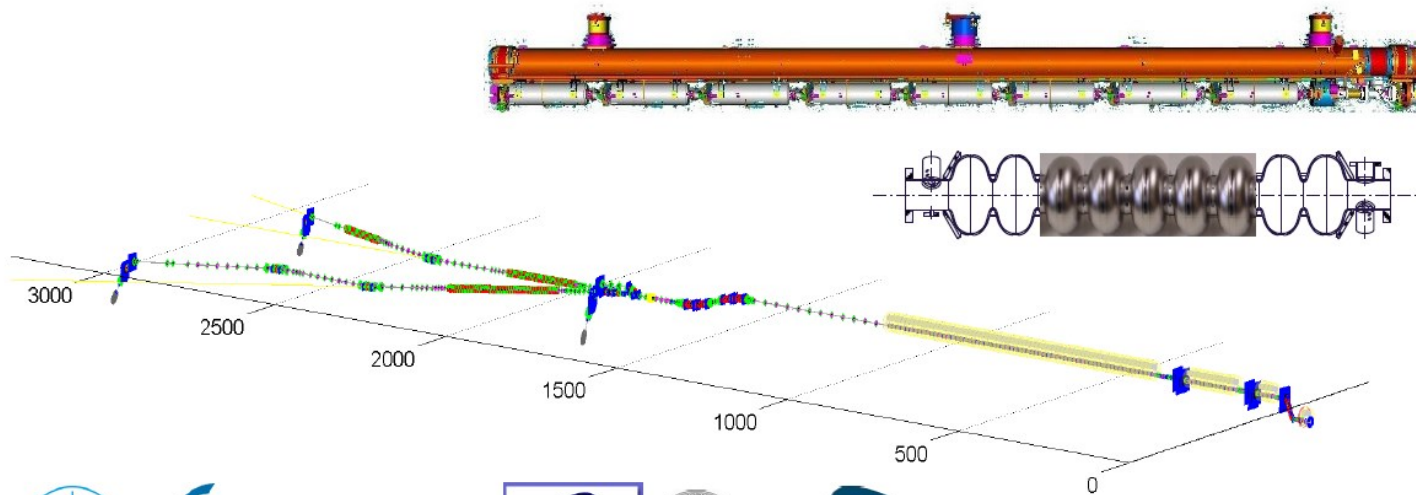
Throughput at all Irfu work stations is currently at 4 days.

Assuming continuous production from now on: **XM100 shipped before end of 4/2016.**

Tunnel View



XFEL International



Wrocław University of Technology



High Level Reconstruction

ILD performance can only be reliably determined with excellent tools

We have a suite of very good tools,
Many of them well developed and high performance

We depend critically on the understanding of these tools!

Any serious re-optimization can only be finalised with a clear and “complete” understanding of our tools.

Topics

- Tracking
- Vertexing
- Particle ID
- Particle Flow
- others

Planned for intense hand-on work on all these and more topics

We hope to consolidate and understand much better our reconstruction system at the end of the week

- Tools and Systems
- DD4HEP
- DDSIM
- MOKKA
- MARLIN

And lay out the work still needed to come to a production system.