# FCAL Workshop CERN 2019

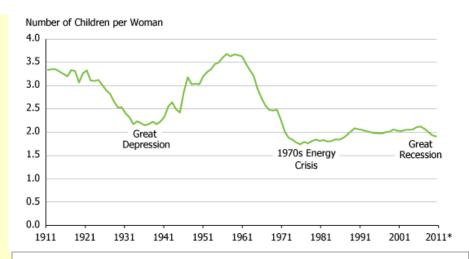
### Introduction

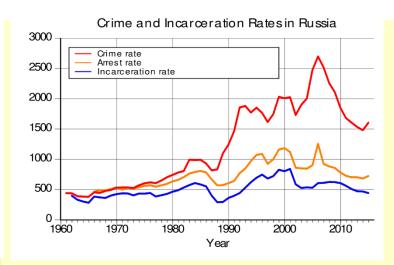
### Wolfgang Lohmann

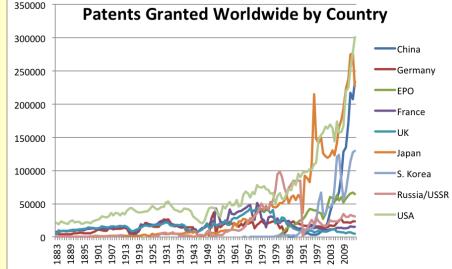




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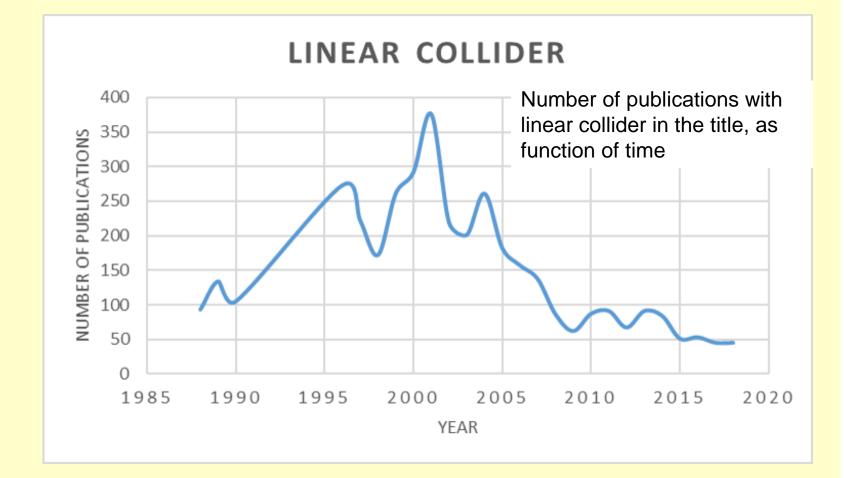
**HELMHULIZ** 

ASSOCIATION

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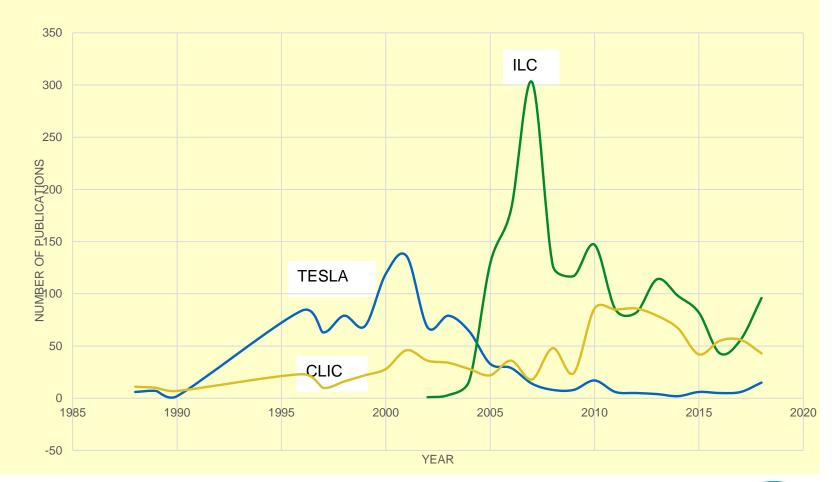
There are events leading to quite dramatic changes of parameters thought to be stable or at least smooth















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What to learn:

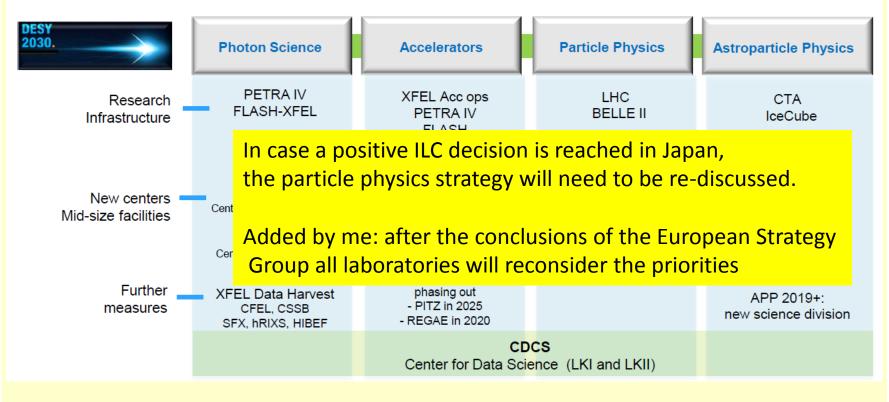
- Human behaviour is influenced by constitutional and economic conditions
- Science should be free. the topics we consider as relevent are based on our understanding, creativity, and our risk
- However, funding of science is influenced by constitutional and economic conditions

So, lets try to decide freely our science topics, and make actively promotion for our science in universities, institutes, politics, and particular in funding agencies

Since we are in a critical phase, the latter is of growing importance !

# **DESY Strategy for ILC (last workshop)**

Major Results from Strategy Process 2016-17: "Priorities 2018+" (details during the review process)



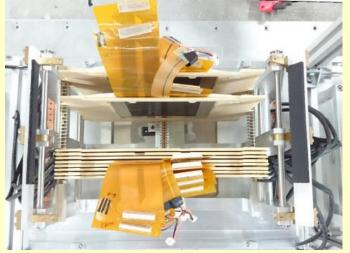


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# Urgend topic for this meeting

#### construction of a demonstrator calorimeter

- completion of the mechanical structure (+laser alignment)
- production of sufficient ASICs in 130 nm technology
- demonstration of power pulsing
- readout board with data concentrator and data transfer
  - $\rightarrow$  much work to be done



### <u>beam tests</u>

- Energy resolution (luminosity spectrum)
- spatial resolution (angular spectrum and fiducial volume)
- bias in the angular measurements (systematic shift to be quantified)

### **Demonstrator and test-beam**

#### <u>status</u>

- Sensors (available, but to be qualified)
- Absorber planes (available, but need mechanical integration)
- Detector plane (technology available, production to be done)
- ASICs (to be produced), APV25 with charge devider as second option
- DAQ with FPGA in preparation
- Laser alignment?

Test-beam: since CERN is not providing test-beam in 2019/20, should try get beam-time at DESY,





### **New Collaborator**

#### THE PARTNER

#### National Research Tomsk State University

Declares that he agrees with the content in the Memorandumof Cooperation of the FCAL collaboration

Done in PLACE 36, Lenin Ave., Tomsk, Russia, 634050 Date Jan 25, 2019

For the PARTNER National Research Tomsk State University

NAME Eduard V. Galazhinskiy

#### FUNCTION

Acting Rector of National Research Tomsk State University



Welcome to Anton Tyazhev from Tomsk State University

14 Institutes Collaborate within FCAL

unclear situation:

**INPPAS** Cracow

NCPHEP Minsk





## Forthcoming events

- Linear Collider Community meeting, Lausanne, April 8-9
  ~ 90 participants, several directors
- Open Symposium ``European Strategy for Particle Physics``, Granada, May 13-16
- EPS, Ghent July 10-17
- Lepton-Photon, Toronto, August 5-10
- Physics in Collision, Taipei, Sept. 16-20

More informations from the Conf. Committee



