# **Knowledge Transfer and Spin-Offs at CERN**

Invenio User Group Meeting October 16<sup>th</sup> 2015 David Mazur IP Dissemination Section Leader Knowledge Transfer Group CERN



Knowledge Transfer | Accelerating Innovation

### Accelerators

Detectors

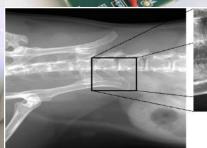
### Computing





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# **KT** Mission

Maximize the technological and knowledge return to Society, specially in the Member States

Promote CERN's image as a center of excellence for technology



### Key words: dissemination and impact!

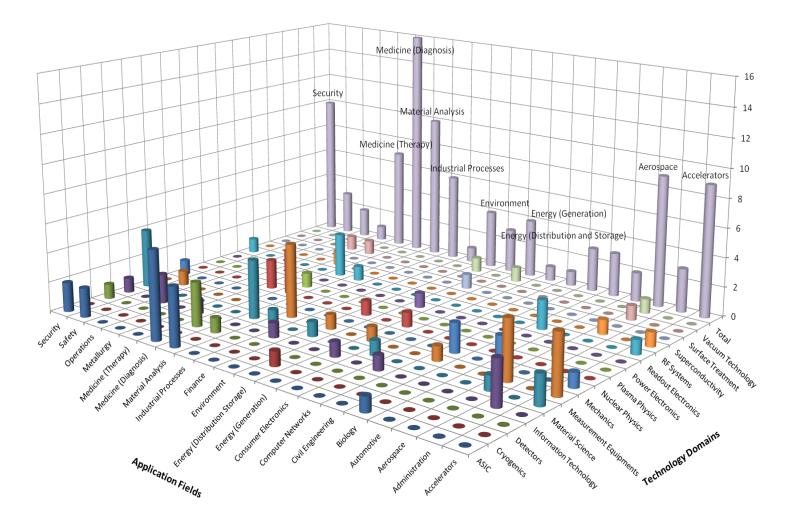


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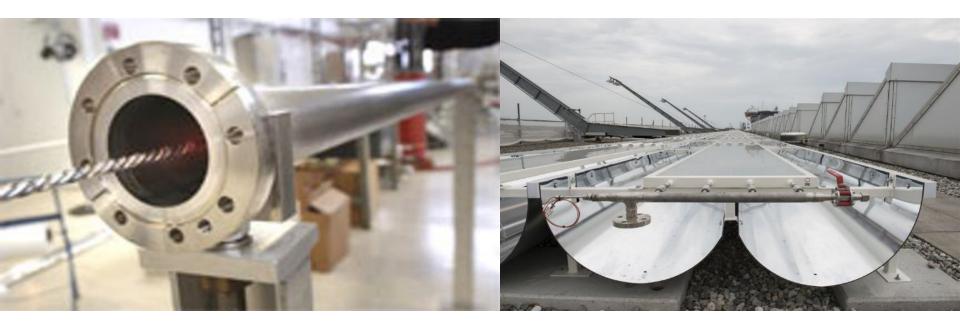


### **CERN's Technology Portfolio**





### From high vacuum... to solar energy



#### **CERN Technology**

Non-Evaporable Getter Coating

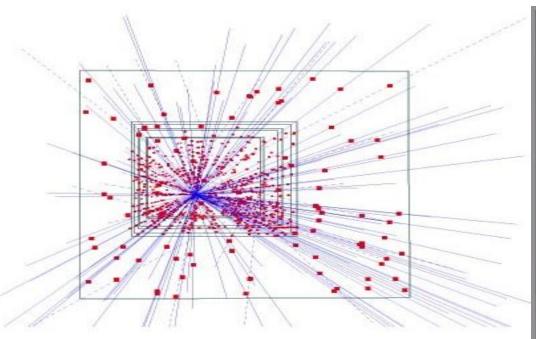
#### Industry (spin-off):

**High Efficiency Solar Collectors** 



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### From silicon pixel detectors to X-Ray diffractometers





#### **CERN Technology**

Hybrid silicon pixel detector

Industry (license):

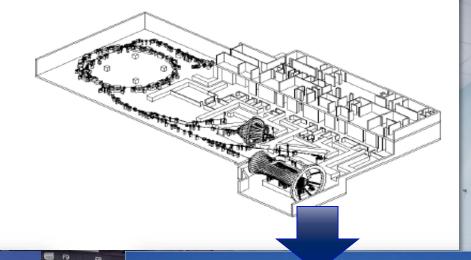
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X-Ray Diffractometer
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Knowledge Transfer | Accelerating Innovation

PIMMS Study 2000 CERN in collaboration with INFN and TERA

has led to:



ebg *Med*Austron



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MedAustron

Invenio User Group Meeting, 16.10.2015, D. Mazur

fondazione CNAQ



#### INTERNATIONAL CONFERENCE ON TRANSLATIONAL RESEARCH IN RADIATION ONCOLOGY | PHYSICS FOR HEALTH IN EUROPE

#### February 15 – 19, 2016 CICG, Geneva, Switzerland





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# Entrepreneurship & Start-up creation

- Weekly entrepreneurship meeting (innovation, IP, funding, ...)
- **Pitching Competition**
- NTNU Screening Week
- Support to entrepreneurial initiatives: THE Port Hackathon
  - Challenge Based Innovation







## Business Incubator Centres (BIC) of CERN Technologies

#### **Established incubators:**

UKSTFC-CERN BICNetherlandsNIKHEF-CERN BICNorwayNTNU-CERN BICGreeceTechnopolis-CERN BICAustriaaccent-CERN BICFranceInnoGexFinlandFinnish BIC of CERN Technologies















supplier

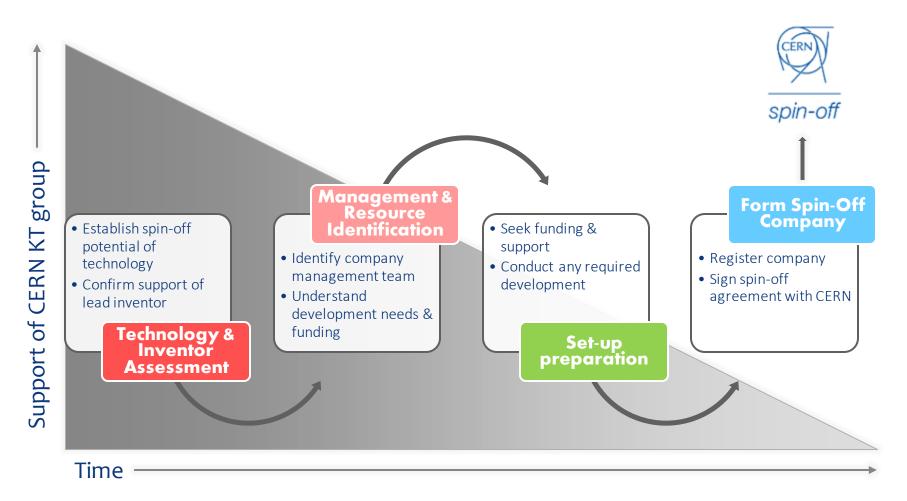


**CERN** in Society



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### **The Process**





# **Open Source Software**

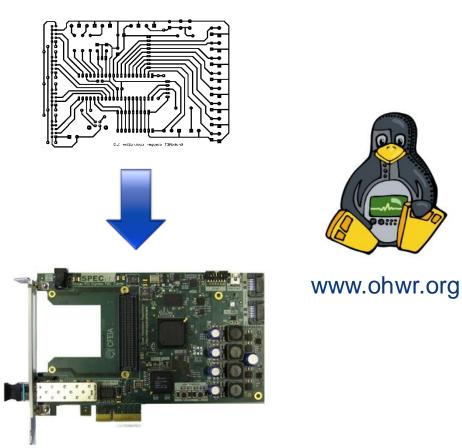


#### And many more



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# Open Source Hardware and CERN Open Hardware Licence (OHL)

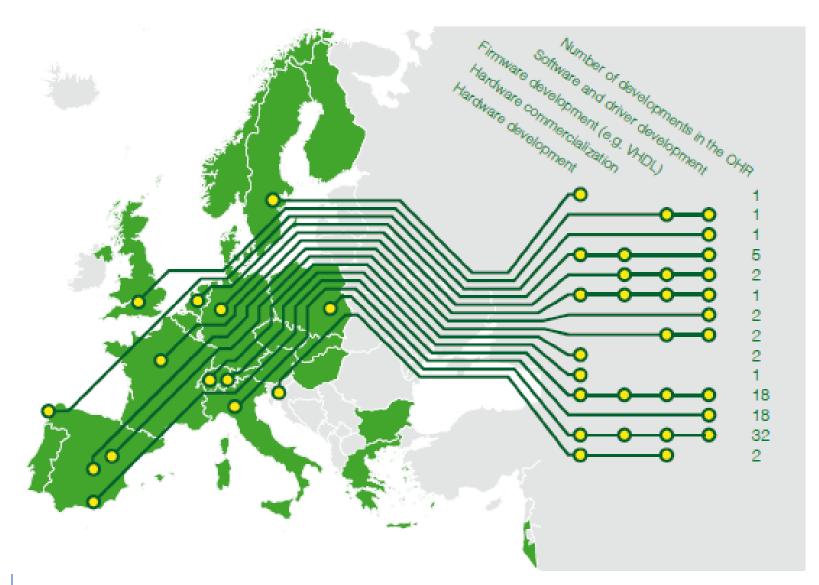


A legal framework to facilitate knowledge exchange across the electronic design community.

Governs the use, copying, modification and distribution of hardware design documentation, and the manufacture and distribution of products.



### CERN OHL: it is making an impact!





# **Publications**



#### cern.ch/kt





#### **CERN Knowledge Transfer Group**

cern.ch/kt

Mail-KT@cern.ch

David.Mazur@cern.ch

Tel. +41 22 767 2623



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