# Marie Curie Big-DATA Proposal

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# The Marie Curie Initial Training Network

- The Marie Curie Initial Training Network (ITN) is a funding instrument established by the European Commission (EC):
- "the purpose of a Marie Curie ITN is to improve career perspectives of researchers in the first five years of their research career, in both public and private sectors, thereby making research careers more attractive to young people...Participants implement a joint research training programme, which should respond to well identified needs in defined scientific or technological areas, expose the researcher to other sectors including private companies, and offer a comprehensive set of training including complementary skills (entrepreneurship, Intellectual Property Rights, etc.)"



## Why is an ITN relevant for CERN openlab?

- The ITN will enable partners in the project to recruit additional personnel, funded by the EC, to work on subjects of joint-interest
- The additional people hired would be young (<5 year's experience) researchers employed on contracts with the partners for up to 3 years</li>
  - EC calls recruits Early Stage Researchers [ESR]
- Means by which to expand to relationship to other major research labs in Europe





Scientific and Technical Excellence

- Multi-disciplinary
- Engagement between industry/academia

Training programme





- Data acquisition
- Data processing and analysis
- Data storage and long-term archiving
- Data distribution and open access
- Data security



### **BIG-DATA** partners

#### **Confirmed**

**CERN** – (coordinator)

CCFE/EFDA

**ESA** 

**European XFEL** 

ILL

Intel

HP

**Siemens** 

Full: recruits at least one ESR

**Associate**: offer training and secondments to ESRs

Must be a mixture of research and industry full partners

#### **Pending Confirmation:**

ORACLE, EMBL-EBI, ETM, Huawei, National University of Ireland, Technical University of Munich



# Synergy of domains and partners

Partner	Data Acquisition	Data Processing /Analysis	Data Storage/ Long-term archiving	Data Distribution / Open Access	Data Security
CERN					
CCFE/EDFA					
E. XFEL					
ILL					
ESA					
Intel					
HP					
Siemens					

# CERN openiab

#### Network events

- Suggest that we expand existing CERN sponsored training programme to be BIG-DATA networking/training events
  - CERN openlab summer student programme
    - Add presentations/modules from other partners to CERN openlab summer student programme
    - <a href="http://openlab.web.cern.ch/education/summer-student-programme">http://openlab.web.cern.ch/education/summer-student-programme</a>
    - Two month residential IT training programme (will count as a secondment)
  - CERN School of Computing
    - Two week residential IT training camp held in a different European country each year
    - https://csc.web.cern.ch/CSC/
- State all ESRs will participate to these programmes once during their 3 year engagement





- Provide more detail on the proposed specific projects
  - Named supervisors
  - Training Programme
- Match-making between subjects/partners to confirm for each ESR who would hire them and where they would be seconded
- Will require prompt input from partners during October