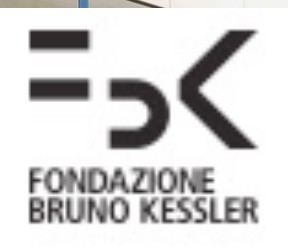


# IFD2014 INFN Workshop on Future Detectors for HL-LHC Trento, March 11-13, 2014



UNIVERSITY  
OF TRENTO - Italy  
Department of Industrial Engineering



Courtesy G.Darbo

# INFN & HL-LHC

- ✓ **Italy** has been a **key player** in the effort awarded the 2013 Nobel Prize for Physics
- ✓ **highly recognized technological contributions** to the LHC experiments and data handling
- ✓ **top priority** of the recent **European Strategy for Particle Physics** to the **exploitation of the full potential of the LHC** including high-luminosity upgrade of the machine and detectors

*L'INFN come pianifica di partecipare a HL-LHC per continuare ad avere un ruolo chiave??*

# R&D towards HL-LHC

- ✓ **tracking, calorimetry and muon systems** with associated **front-end and read-out electronics**
- ✓ **trigger, data acquisition and computing**
- ✓ **IFD14: a common LHC experiments' framework** to work on **new R&D ideas** with constructive interaction with:
  - national industries → **TT & spinoff**
  - research centers and facilities → **FBK + ???****to prepare for Horizon2020 + any other external fundings call**

*L'INFN come puo' sfruttare al meglio gli R&D e gli sviluppi tecnologici stimolati dalla sfida e dalla prospettiva di HL-LHC??*