THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

15TH SESSION

21–25 May 2012
Geneva

Contribution by

CERN

Accelerating Science and Innovation

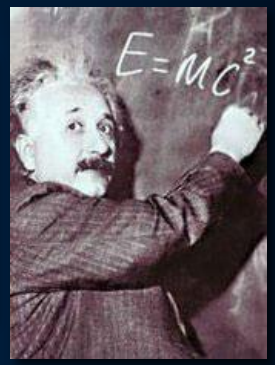
Mr. Rolf-Dieter Heuer
Director-General

Accelerating Science and Innovation

The Mission of CERN

- **Push forward** the frontiers of knowledge

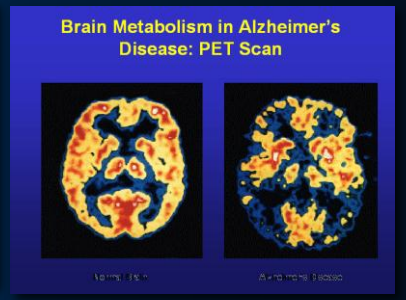
  E.g. the secrets of the Big Bang …what was the matter like within the first moments of the Universe's existence?



- **Develop** new technologies for accelerators and detectors

  Information technology - the Web and the GRID

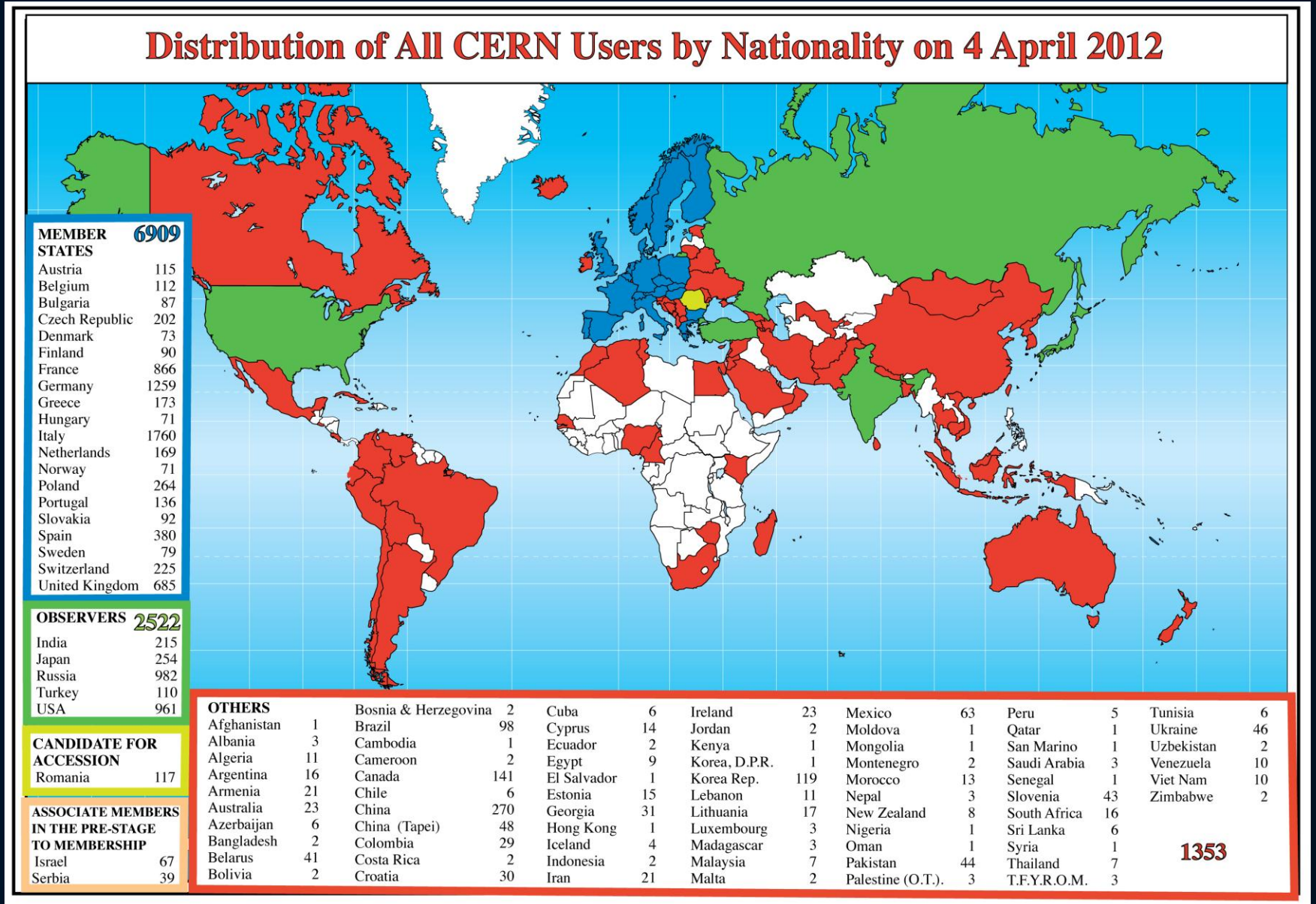
  Medicine - diagnosis and therapy

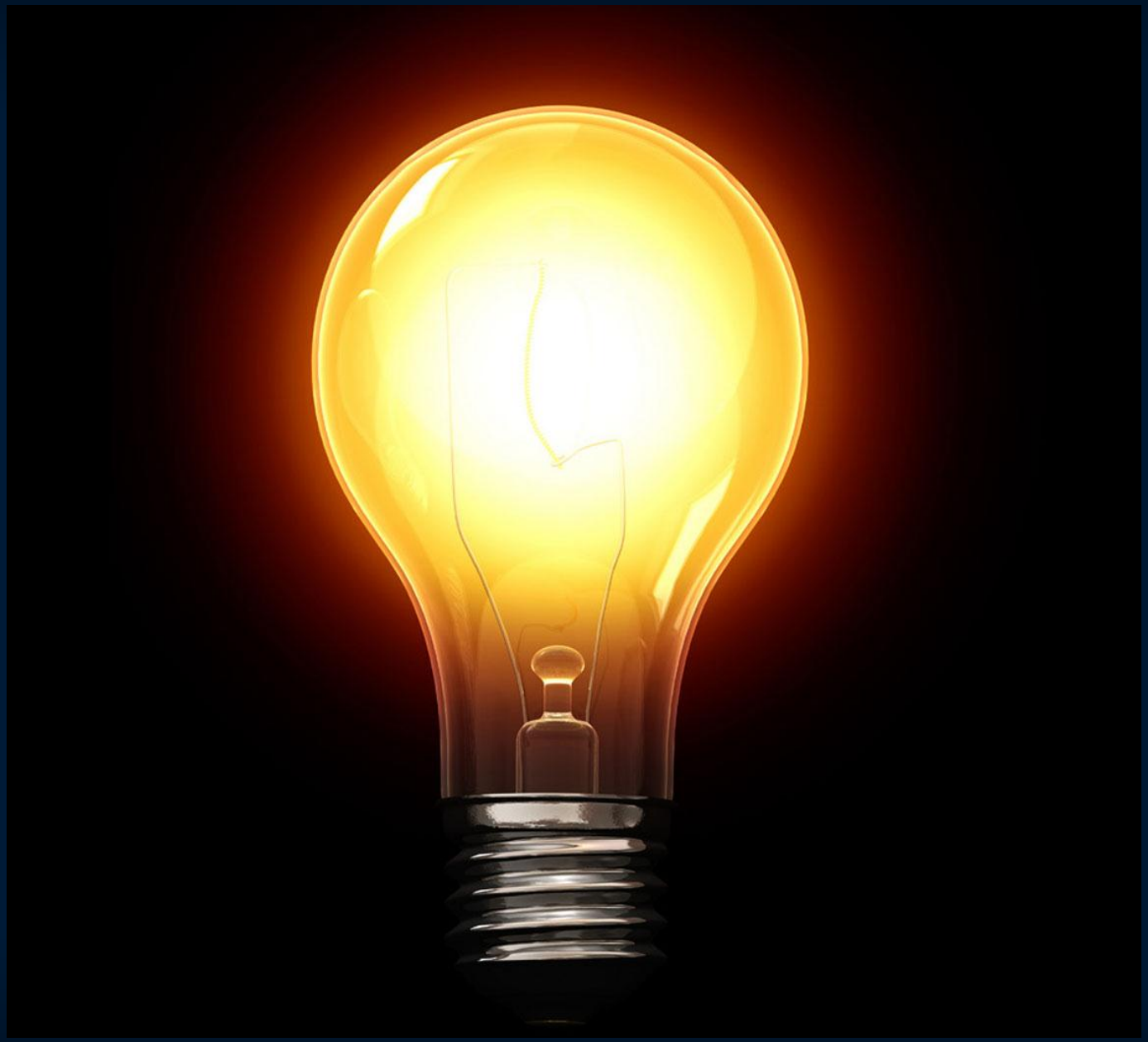


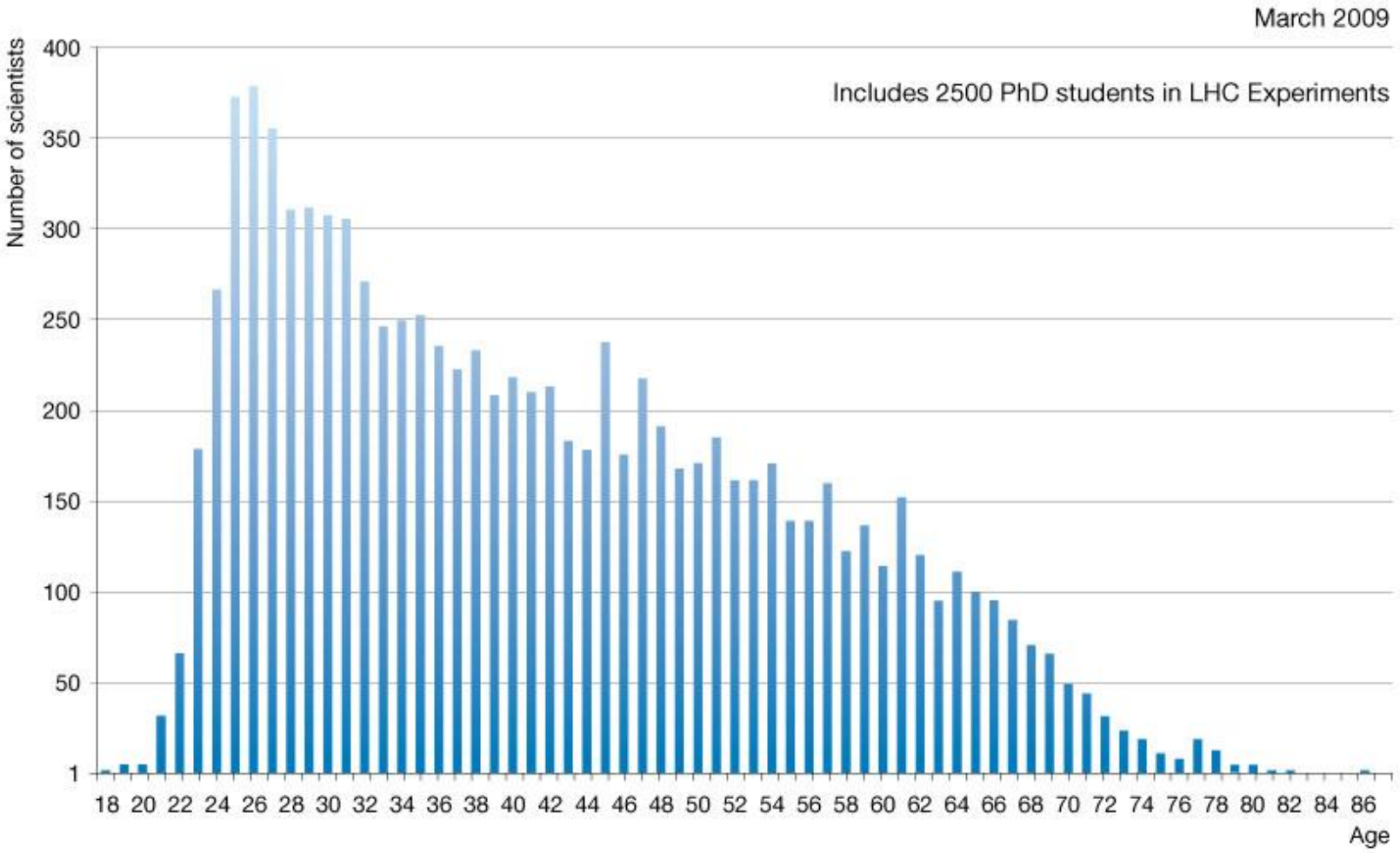
- **Train** scientists and engineers of tomorrow

- **Unite** people from different countries and cultures

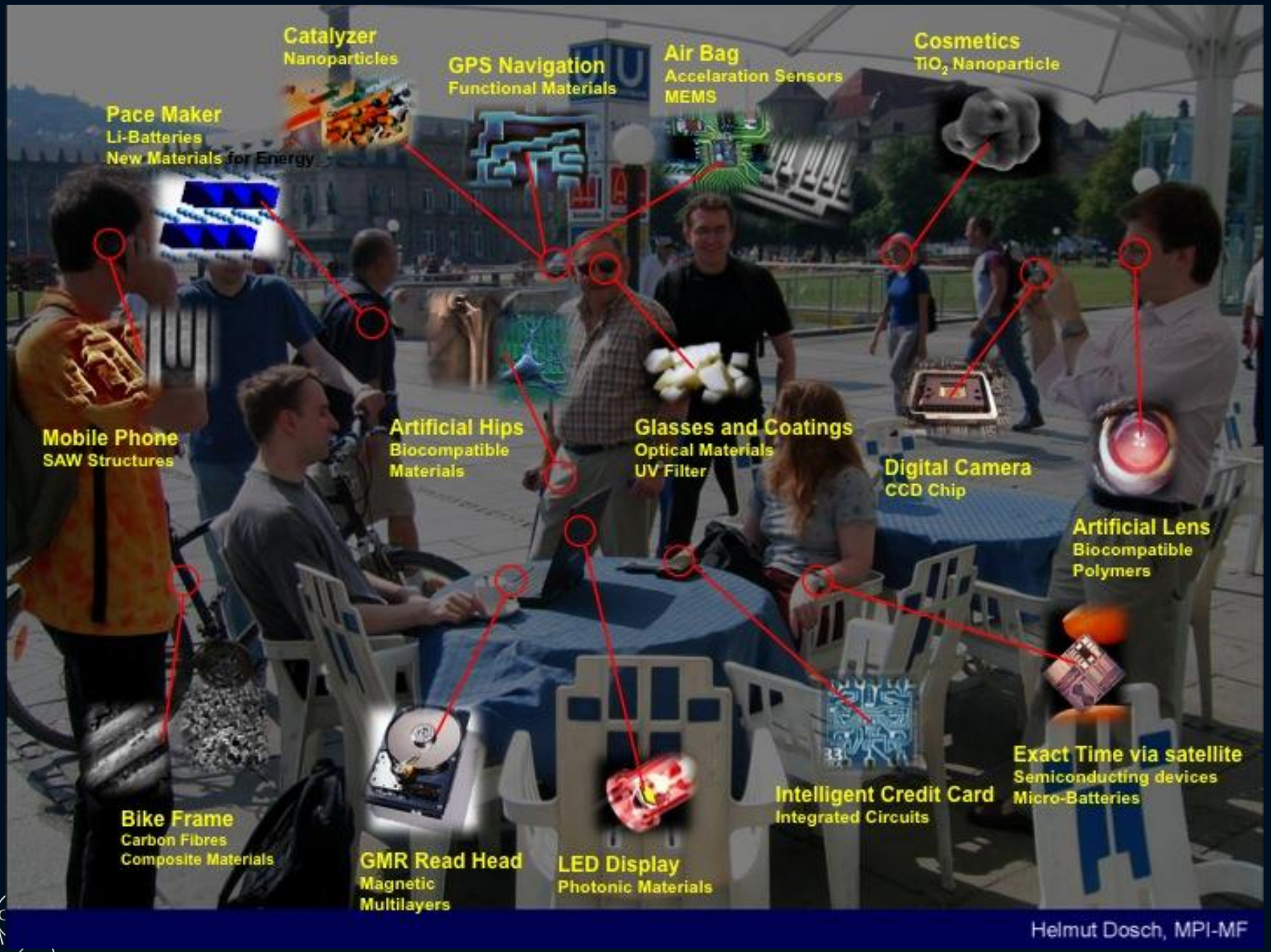
Science is getting more and more global






March 2009
Includes 2500 PhD students in LHC Experiments
Number of scientists
400
350
300
250
200
150
100
50
1
18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86
Age


On a typical day somewhere in the world….
Helmut Dosch, MPI-MF


Catalyzer
Nanoparticles
GPS Navigation
Functional Materials
Air Bag
Accelaration Sensors
MEMS
Cosmetics
TiO_2 Nanoparticle
Pace Maker
Li-Batteries
New Materials for Energy
Mobile Phone
SAW Structures
Artificial Hips
Biocompatible
Materials
Glasses and Coatings
Optical Materials
UV Filter
Digital Camera
CCD Chip
Artificial Lens
Biocompatible
Polymers
Bike Frame
Carbon Fibres
Composite Materials
GMR Read Head
Magnetic
Multilayers
LED Display
Photonic Materials
Intelligent Credit Card
Integrated Circuits
Exact Time via satellite
Semiconducting devices
Micro-Batteries
Helmut Dosch, MPI-MF

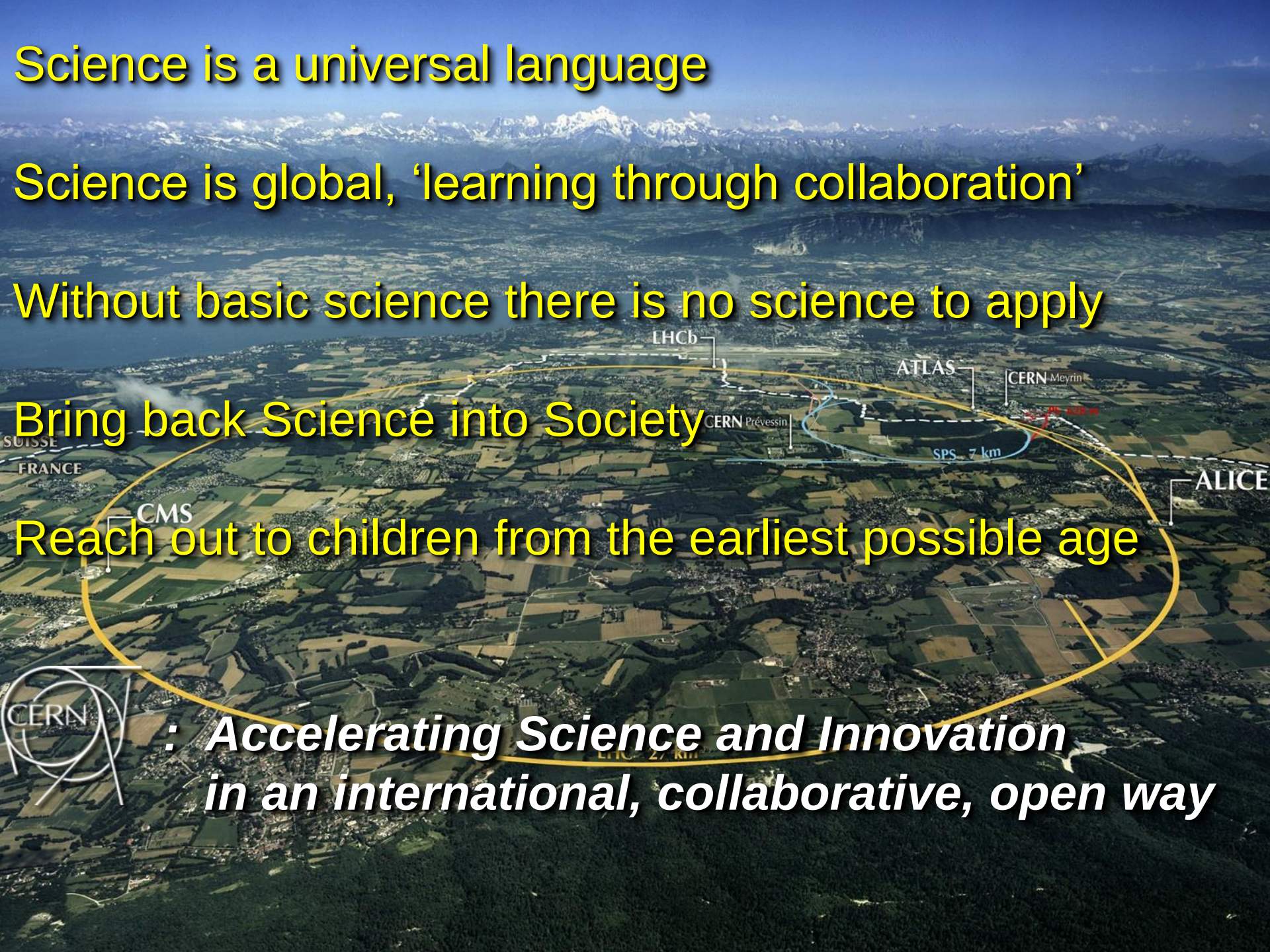
Science is a universal language

Science is global, ‘learning through collaboration’

Without basic science there is no science to apply

Bring back Science into Society

Reach out to children from the earliest possible age



: Accelerating Science and Innovation in an international, collaborative, open way