

**THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY  
FOR DEVELOPMENT**

**15<sup>TH</sup> SESSION**

**21–25 May 2012  
Geneva**

**Contribution by**

**CERN**

**Accelerating Science and Innovation**

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Director-General**

**The views presented here are the contributor's and do not necessarily reflect the views and the position of the United Nations or the United Nations Conference on Trade and Development**



SUISSE  
FRANCE



LHCb

ATLAS

CERN Meyrin

CERN Prévessin

SPS - 7 km

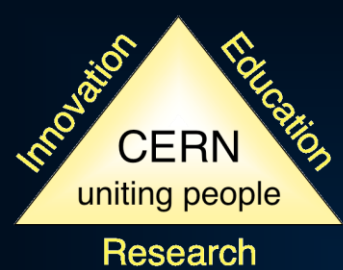
CMS

ALICE

# Accelerating Science and Innovation

LHC - 27 km

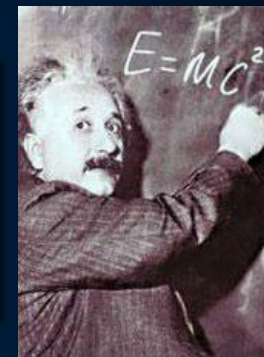




# The Mission of CERN

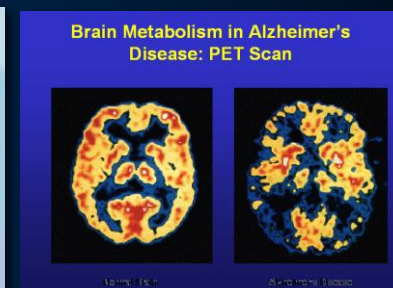
- ❑ **Push forward** the frontiers of knowledge

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

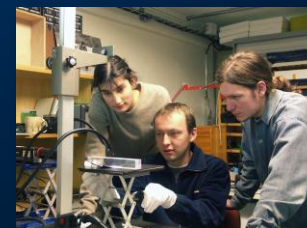


- ❑ **Develop** new technologies for accelerators and detectors

Information technology - the Web and the GRID  
Medicine - diagnosis and therapy



- ❑ **Train** scientists and engineers of tomorrow

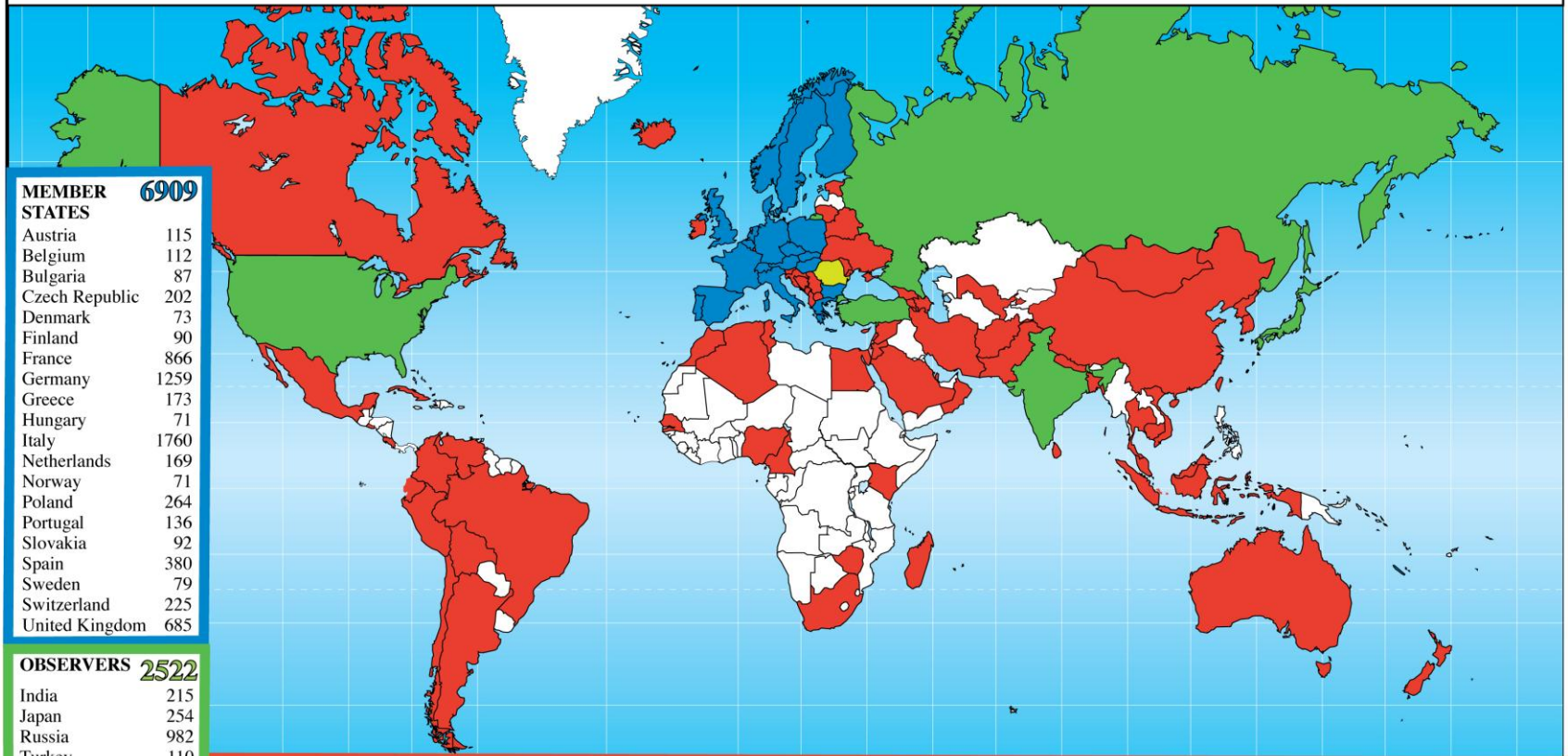


- ❑ **Unite** people from different countries and cultures



# Science is getting more and more global

## Distribution of All CERN Users by Nationality on 4 April 2012



### MEMBER STATES 6909

Austria	115
Belgium	112
Bulgaria	87
Czech Republic	202
Denmark	73
Finland	90
France	866
Germany	1259
Greece	173
Hungary	71
Italy	1760
Netherlands	169
Norway	71
Poland	264
Portugal	136
Slovakia	92
Spain	380
Sweden	79
Switzerland	225
United Kingdom	685

### OBSERVERS 2522

India	215
Japan	254
Russia	982
Turkey	110
USA	961

### CANDIDATE FOR ACCESSION

Romania	117
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### ASSOCIATE MEMBERS IN THE PRE-STAGE TO MEMBERSHIP

Israel	67
Serbia	39

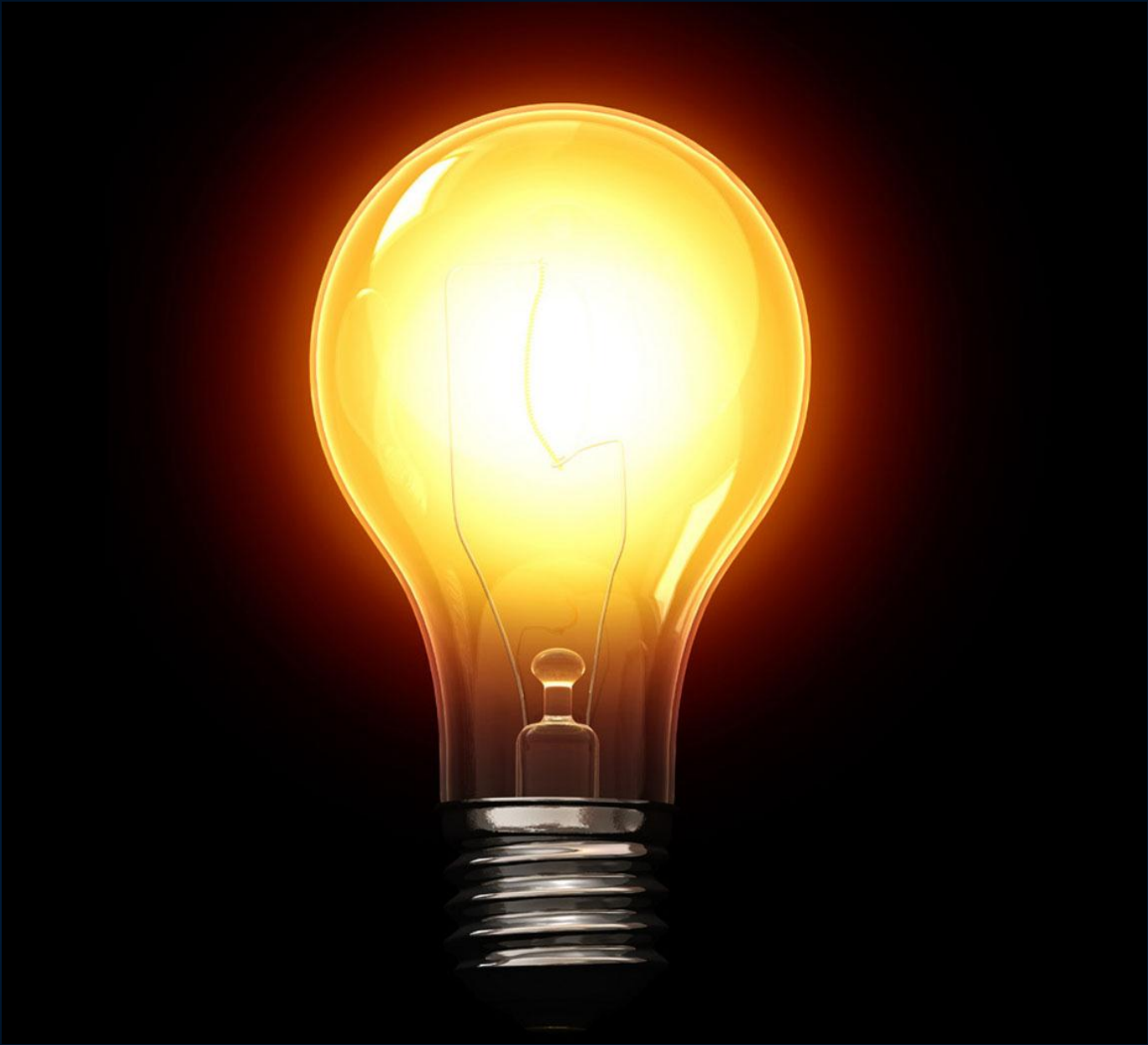
### OTHERS

Afghanistan	1	Bosnia & Herzegovina	2	Cuba	6	Ireland	23	Mexico	63	Peru	5	Tunisia	6
Albania	3	Brazil	98	Cyprus	14	Jordan	2	Moldova	1	Qatar	1	Ukraine	46
Algeria	11	Cambodia	1	Ecuador	2	Kenya	1	Mongolia	1	San Marino	1	Uzbekistan	2
Argentina	16	Cameroon	2	Egypt	9	Korea, D.P.R.	1	Montenegro	2	Saudi Arabia	3	Venezuela	10
Armenia	21	Canada	141	El Salvador	1	Korea Rep.	119	Morocco	13	Senegal	1	Viet Nam	10
Australia	23	Chile	6	Estonia	15	Lebanon	11	Nepal	3	Slovenia	43	Zimbabwe	2
Azerbaijan	6	China	270	Georgia	31	Lithuania	17	New Zealand	8	South Africa	16		
Bangladesh	2	China (Taipei)	48	Hong Kong	1	Luxembourg	3	Nigeria	1	Sri Lanka	6		
Belarus	41	Colombia	29	Iceland	4	Madagascar	3	Oman	1	Syria	1		
Bolivia	2	Costa Rica	2	Indonesia	2	Malaysia	7	Pakistan	44	Thailand	7		
		Croatia	30	Iran	21	Malta	2	Palestine (O.T.)	3	T.F.Y.R.O.M.	3		

1353

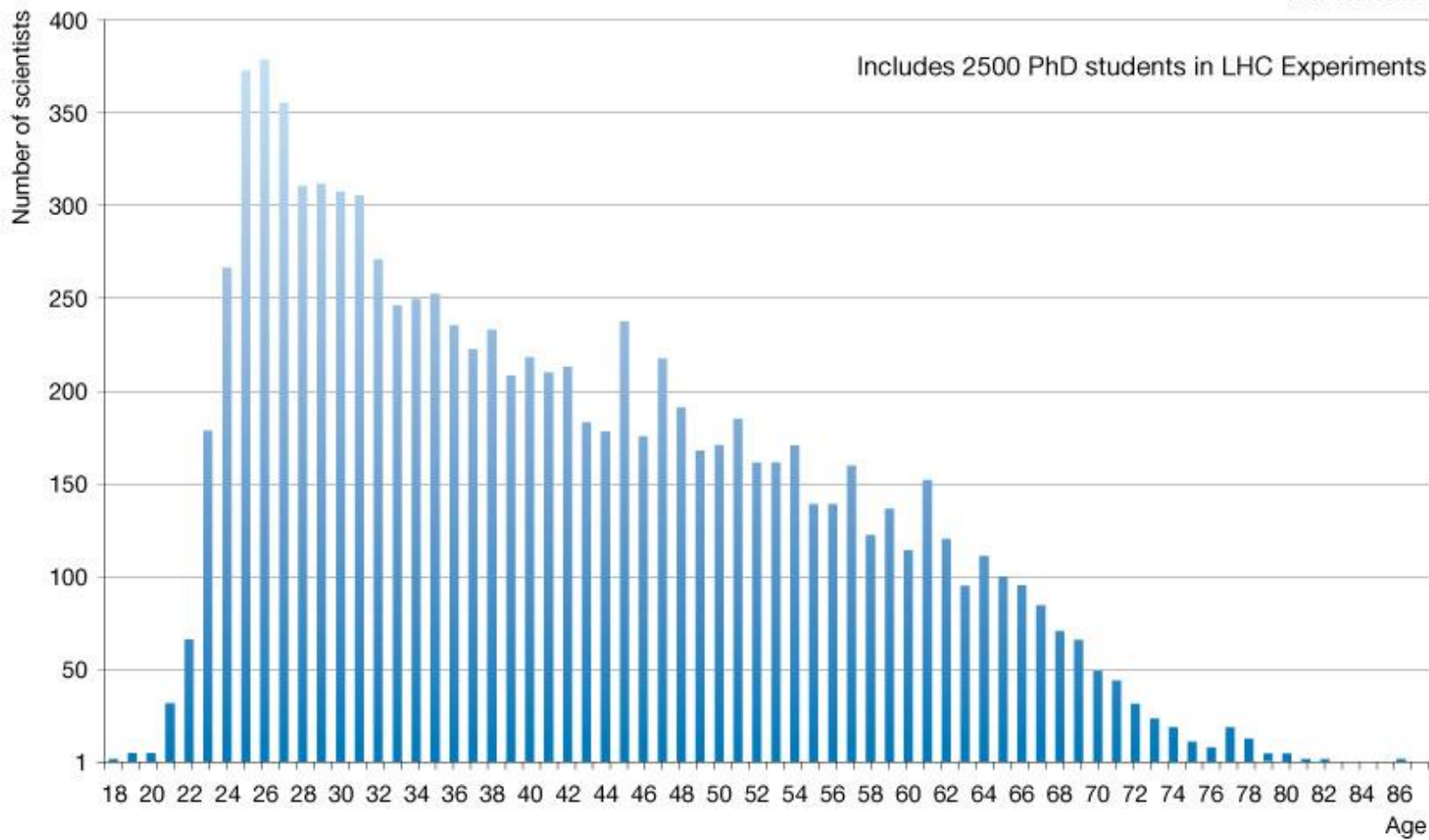








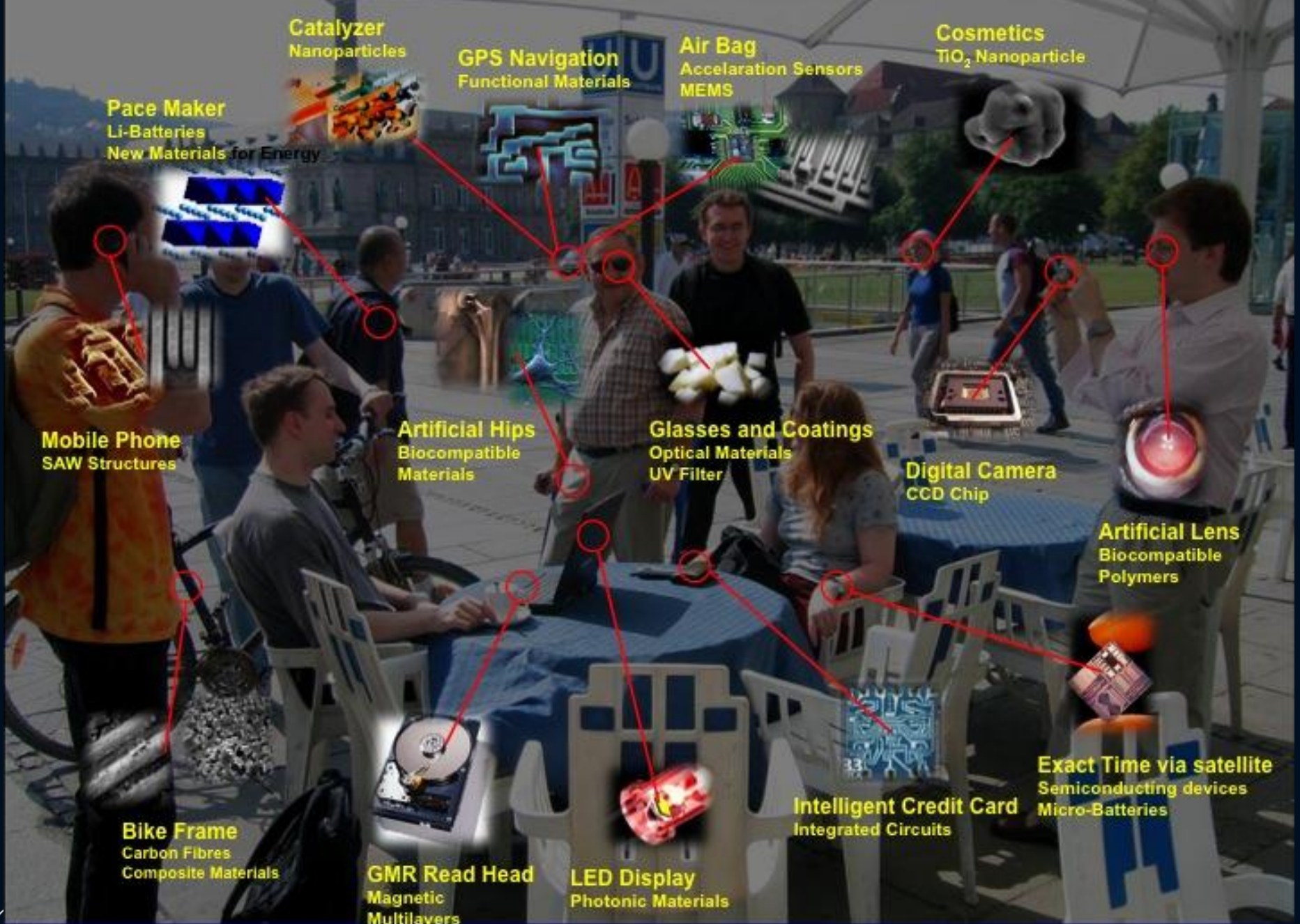
March 2009



On a typical day somewhere in the world....







**Catalyzer**  
Nanoparticles

**GPS Navigation**  
Functional Materials

**Air Bag**  
Acceleration Sensors  
MEMS

**Cosmetics**  
TiO<sub>2</sub> 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



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**

