CERN Teacher Programmes

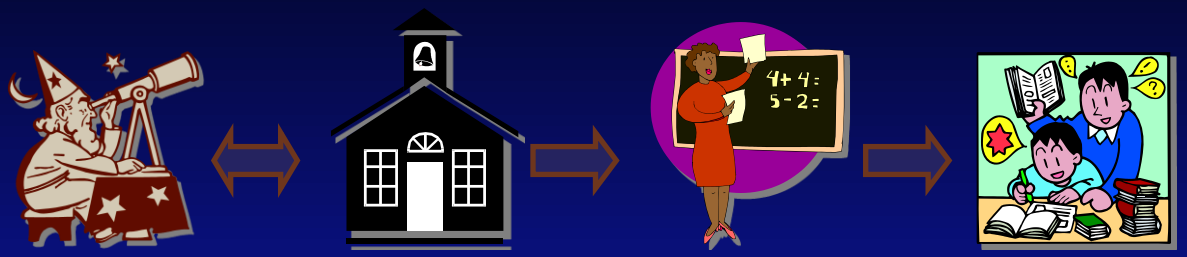
Inspiring the next generation of scientists

Mick Storr

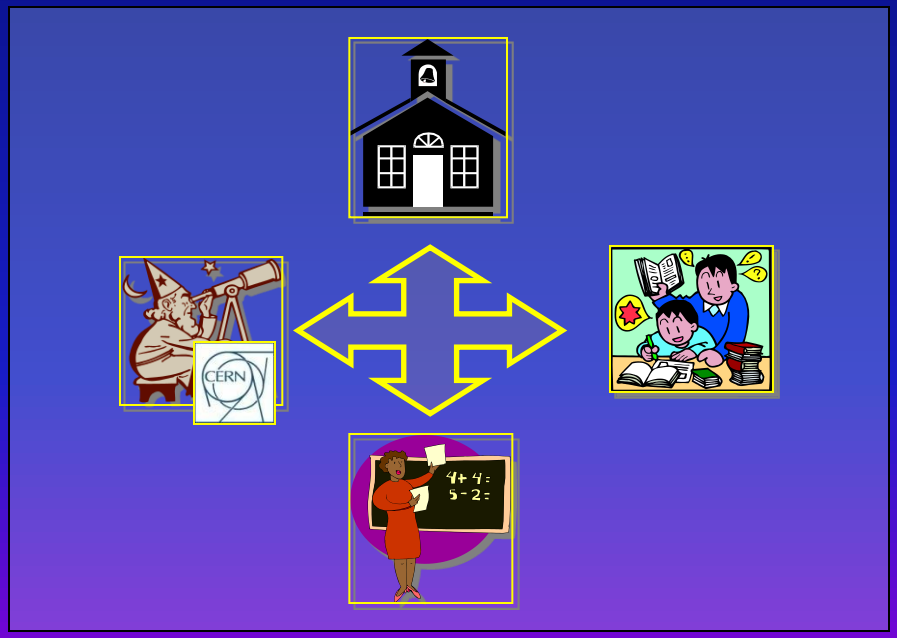
Head CERN Teacher Programmes
and
Visits Service

Objective of Teacher Programmes
To bring modern research closer to schools

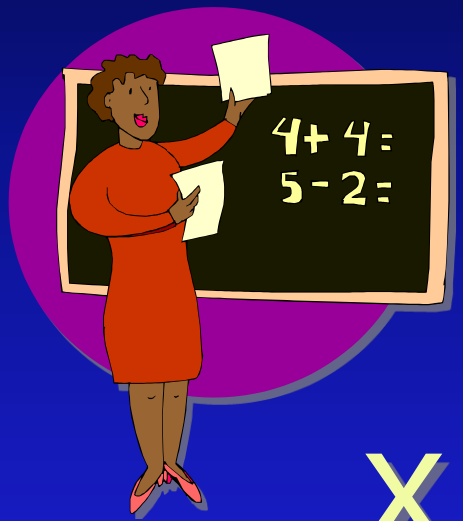
OLD

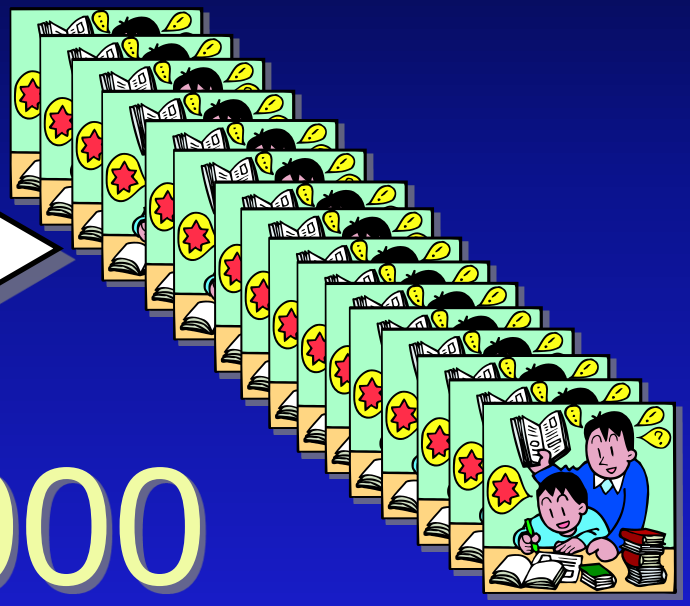


NEW



Looking for multiplicative factors





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School Teacher

School Students

What are we trying to achieve with the help of physics teachers ?

1: RAISE AND MAINTAIN THE INTEREST OF STUDENTS IN MODERN SCIENCE

Motivate them to continue scientific education at school
Help them to better understand the physical world

Improve scientific literacy

2: INSTIL A FEELING OF MYSTERY AND DISCOVERY POTENTIAL

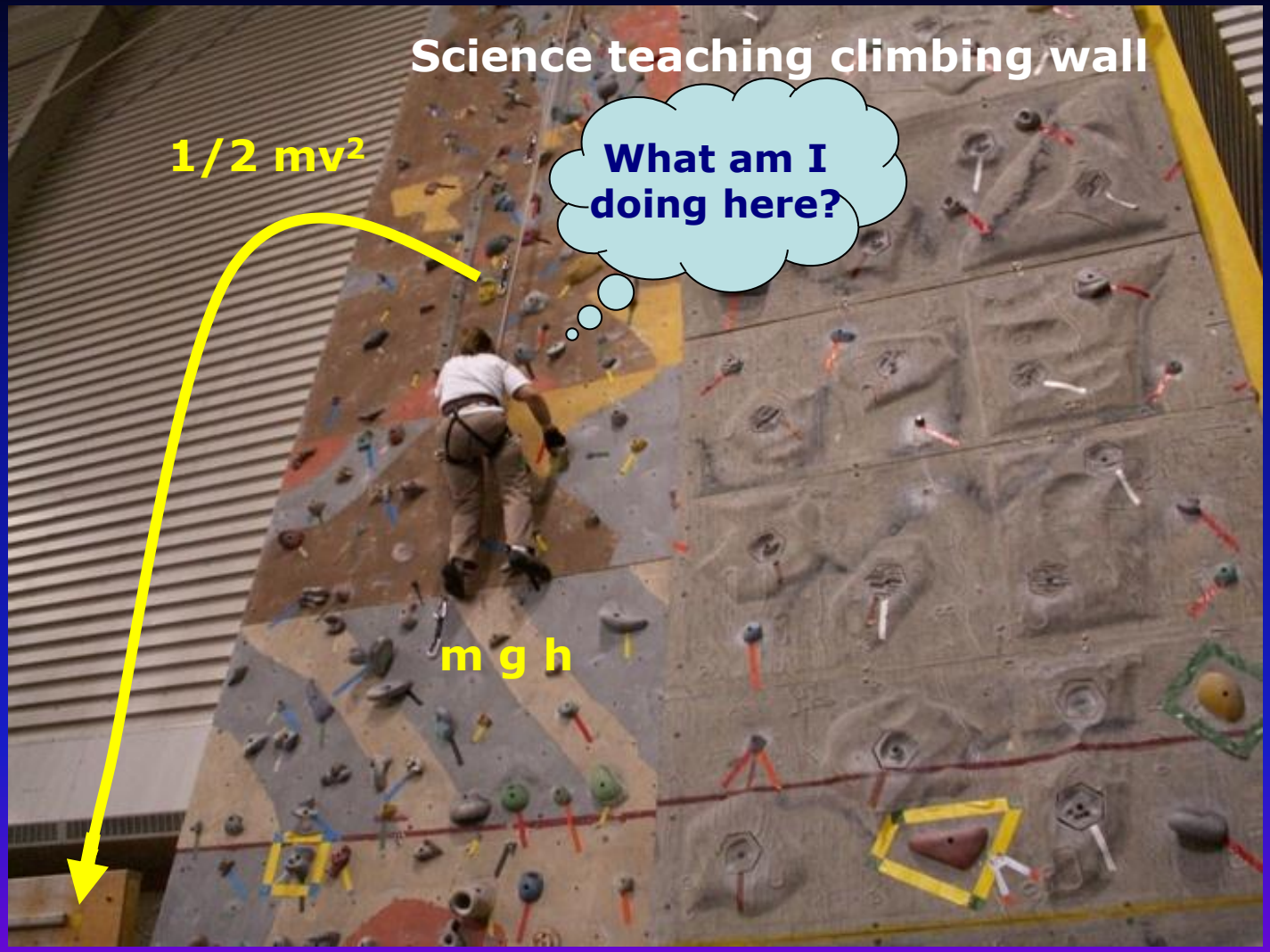
Motivate students to take up science at universities

Prepare the future generation of scientists

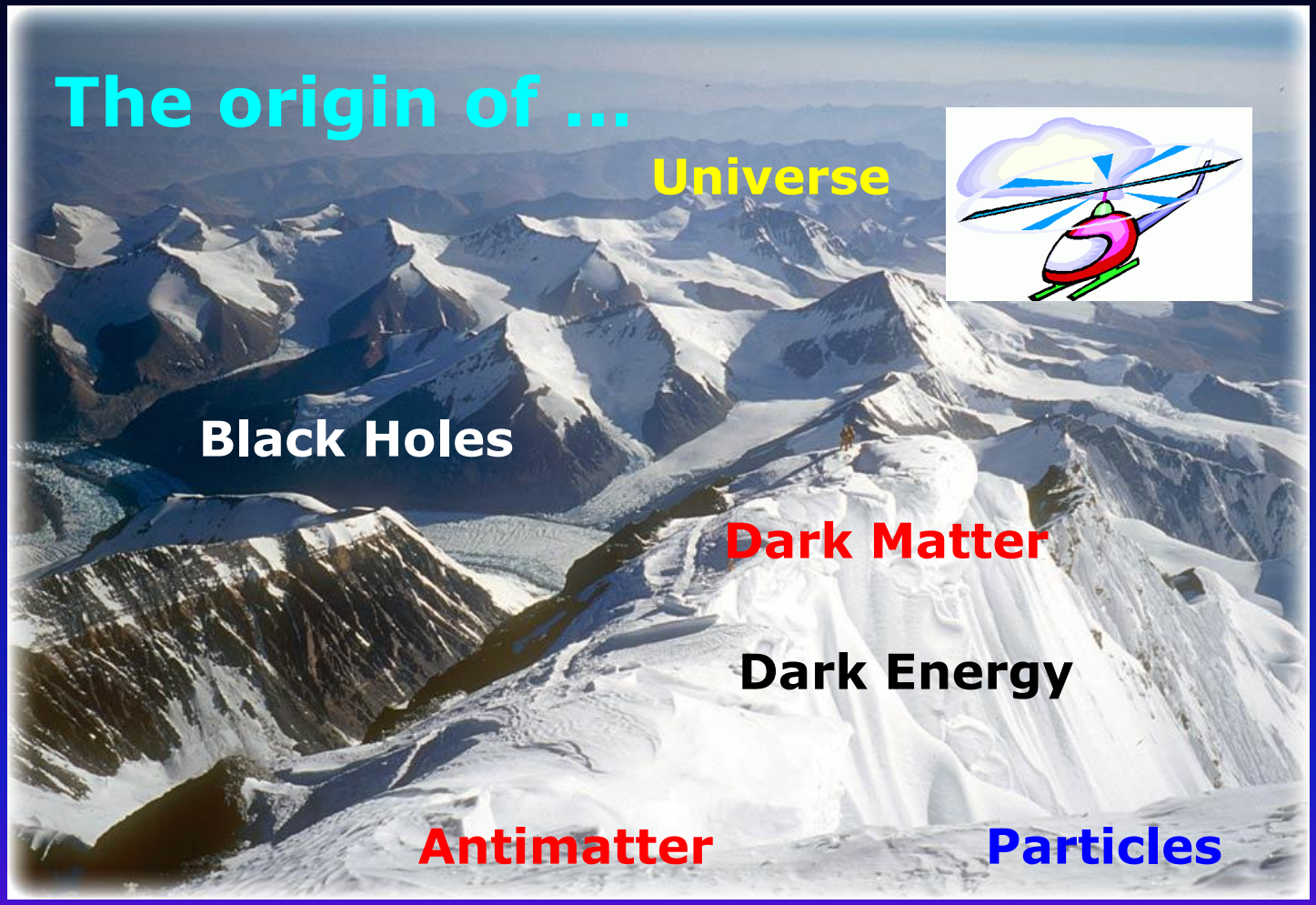
SCIENCE IS ALIVE !

How researchers view science

How school students view science



Take students on a sight-seeing tour …



Link modern physics to school curriculum

Residential Teacher Programmes

Basic content

- Lectures
  - Introductions to CERN, Particle Physics, Cosmology, the LHC Experiments, Particle Accelerators, Medical Applications of Particle Physics, and the GRID
- Visits to experimental facilities
- Hands-on activities
- Working group activities
- Opportunities to meet working research physicists in a variety of informal settings.

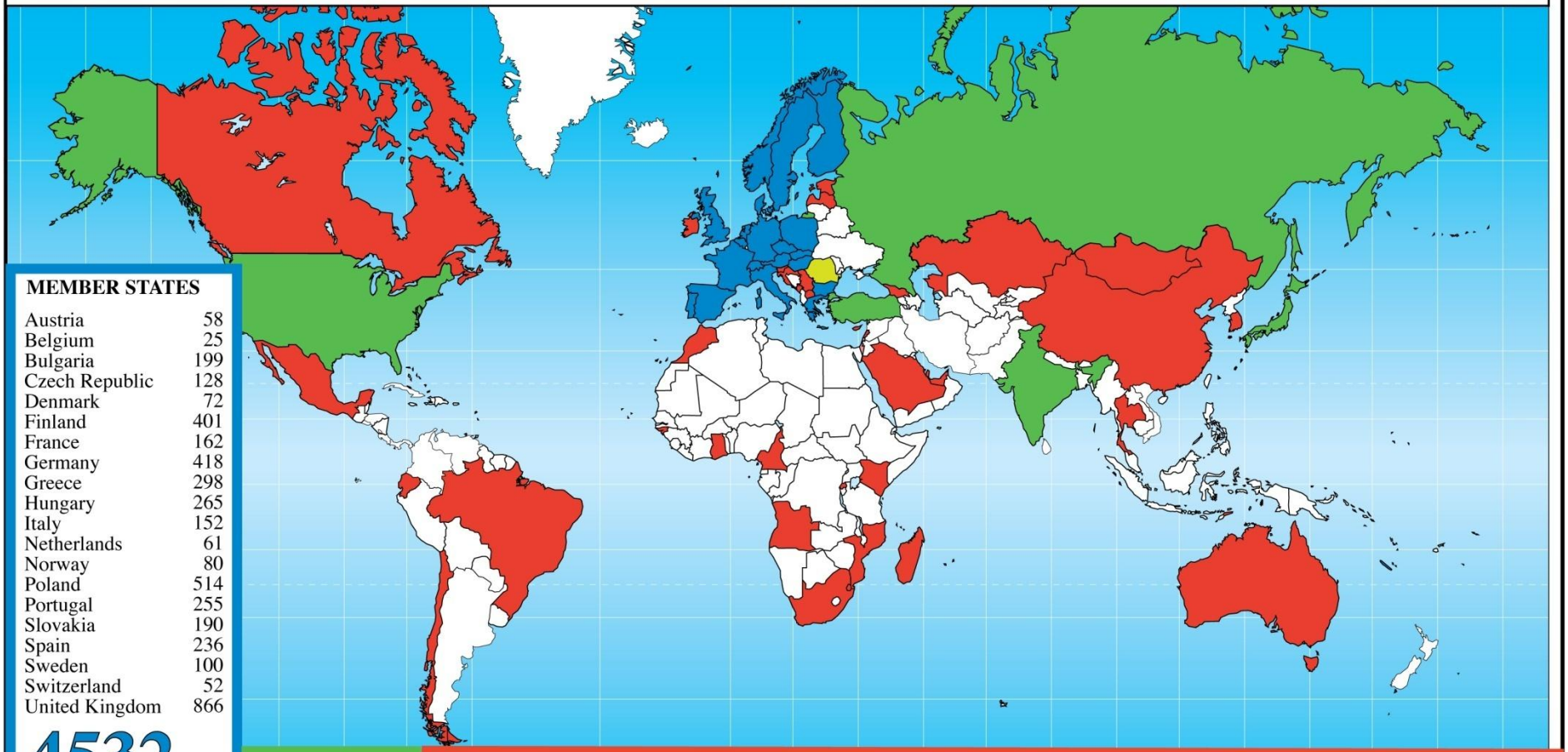
All lectures are web archived and made publicly available

Outcome

- Newly inspired, motivated and confident teachers
- Inspire and motivate students
- Communicate with their colleagues
- Communicate with the general public
- Act as ambassadors for science, physics, particle physics, CERN

Excellent examples among the many teachers who have attended our programmes

CERN Teacher Programme Participants 1998 - 2011



MEMBER STATES

Austria	58
Belgium	25
Bulgaria	199
Czech Republic	128
Denmark	72
Finland	401
France	162
Germany	418
Greece	298
Hungary	265
Italy	152
Netherlands	61
Norway	80
Poland	514
Portugal	255
Slovakia	190
Spain	236
Sweden	100
Switzerland	52
United Kingdom	866

4532

CANDIDATE FOR ACCESSION

Romania	10

ASSOCIATE MEMBER IN THE PRE-STAGE TO MEMBERSHIP

Israel	2

OBSERVER STATES

India	2
Japan	3
Russia	132
Turkey	3
USA	56

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OTHERS

Angola	4	China	1	Kenya	2	Qatar	1	Thailand	4
Australia	3	Croatia	1	Latvia	1	Rwanda	15	T.F.Y.R.O.M.	11
Azerbaijan	1	Cyprus	4	Lebanon	1	Sao Tome	2	Timor-Leste	1
Brazil	53	Ecuador	1	Madagascar	1	Saudi Arabia	1	Ukraine	30
Cameroon	1	Estonia	18	Malta	36	Serbia	10	U.A.E.	1
Canada	1	Georgia	16	Mexico	5	Singapore	2		
Cape Verde	2	Ghana	4	Mongolia	1	Slovenia	21		
Chile	3	Guinea Bissau	1	Montenegro	13	South Africa	6		
		Ireland	3	Morocco	2	South Korea	22		
		Kazakhstan	3	Mozambique	13	Swaziland	1		

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Arthur C. Clarke

Author of 2001 : A Space Odyssey

- "When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong." •
- "The only way of discovering the limits of the possible is to venture a little way past them into the impossible."
- "Any sufficiently advanced technology is indistinguishable from magic."

Our goal, with the help of teachers, is to bring a little of the magic of CERN into the classroom