



CERN Teacher Programmes

Inspiring the next generation of scientists

Mick Storr

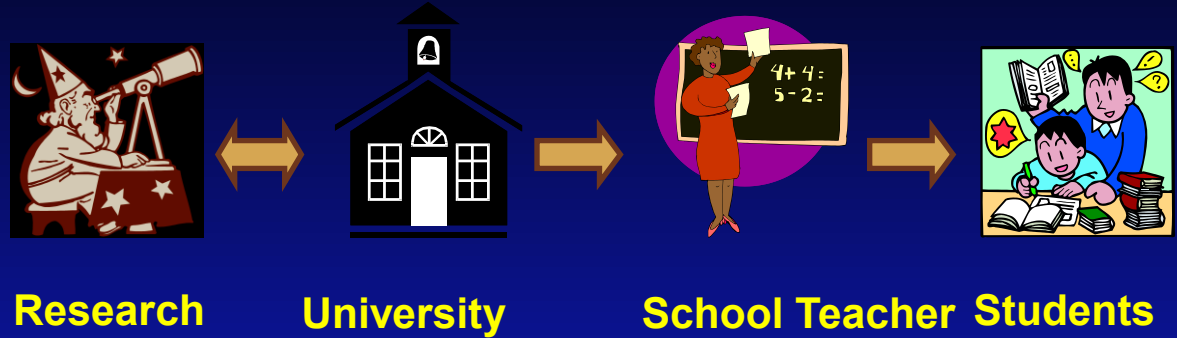
Head CERN Teacher Programmes
and
Visits Service



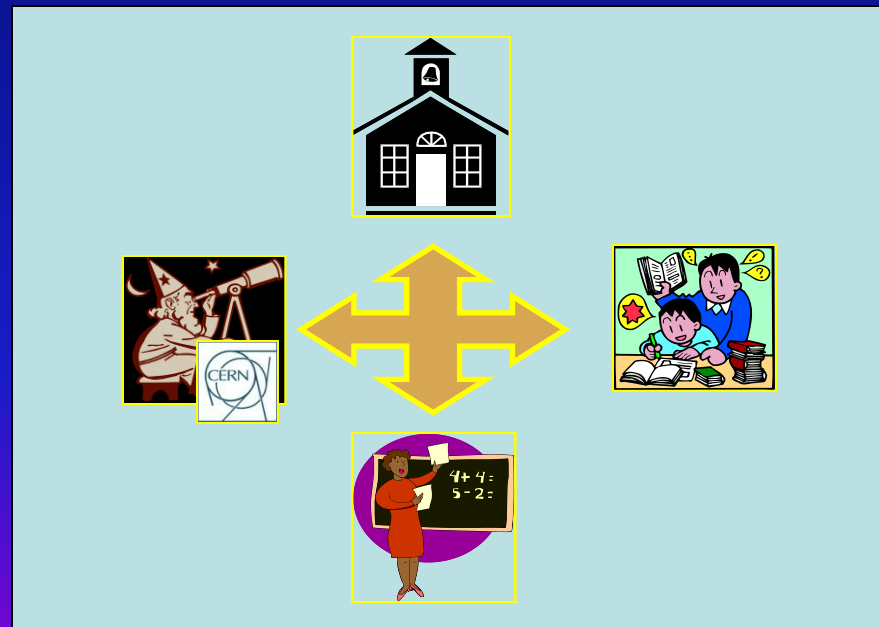
Objective of Teacher Programmes

To bring modern research closer to schools

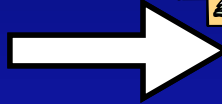
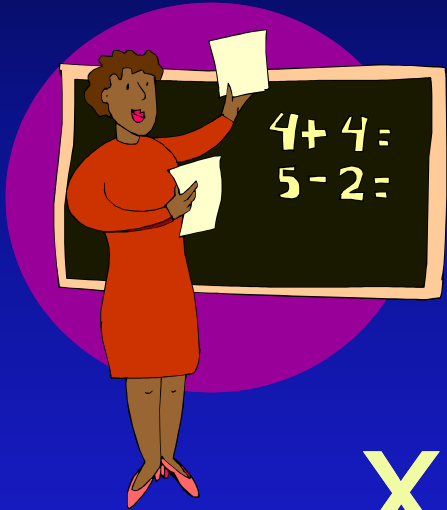
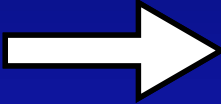
OLD



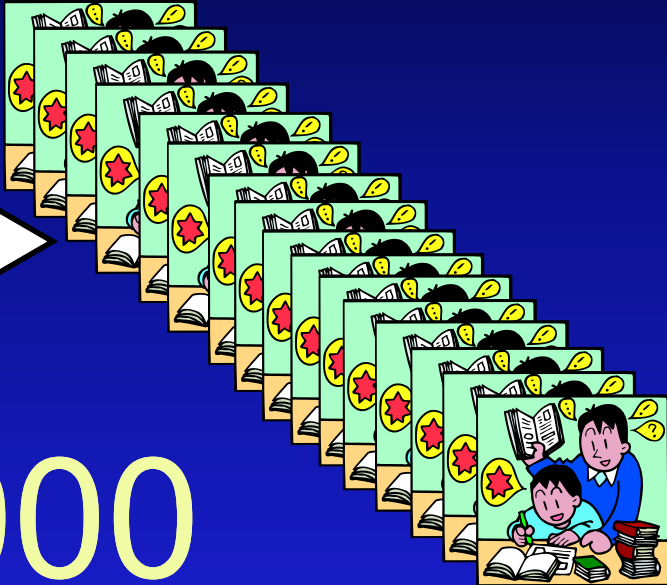
NEW



Looking for multiplicative factors



x 1000



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 physics at universities

Prepare the future generation of physicists

SCIENCE IS ALIVE !

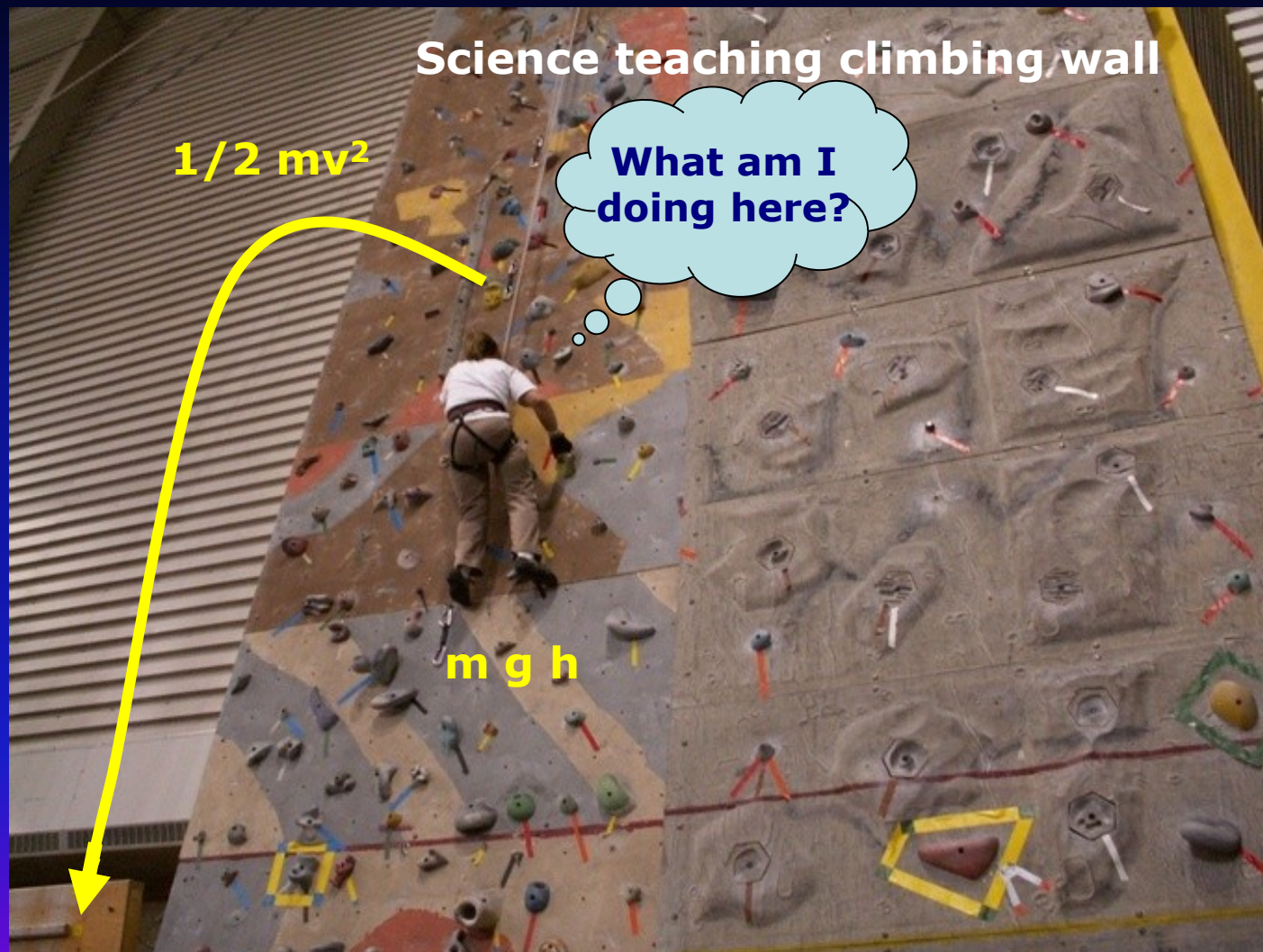


How researchers view science



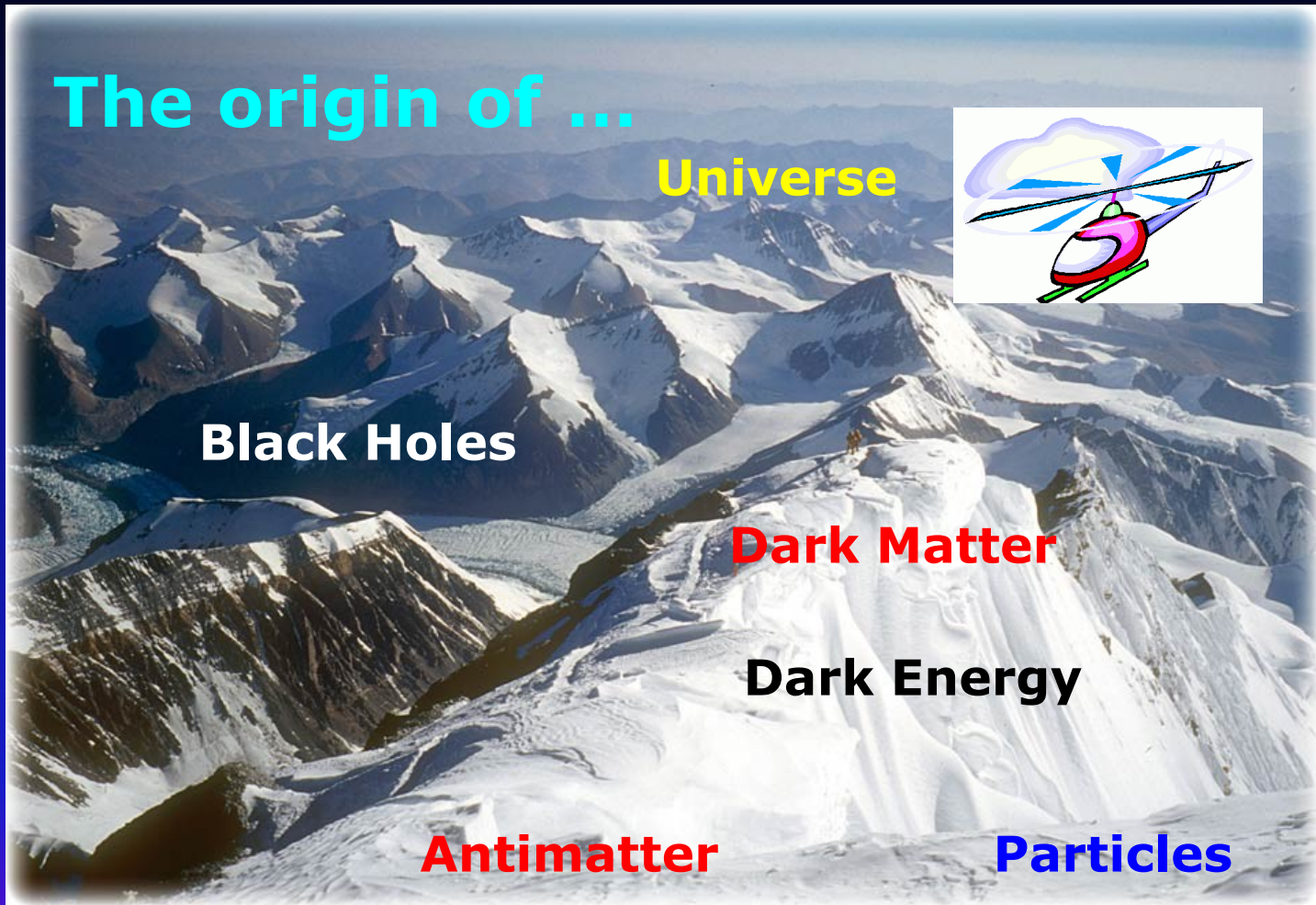


How school students view science





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

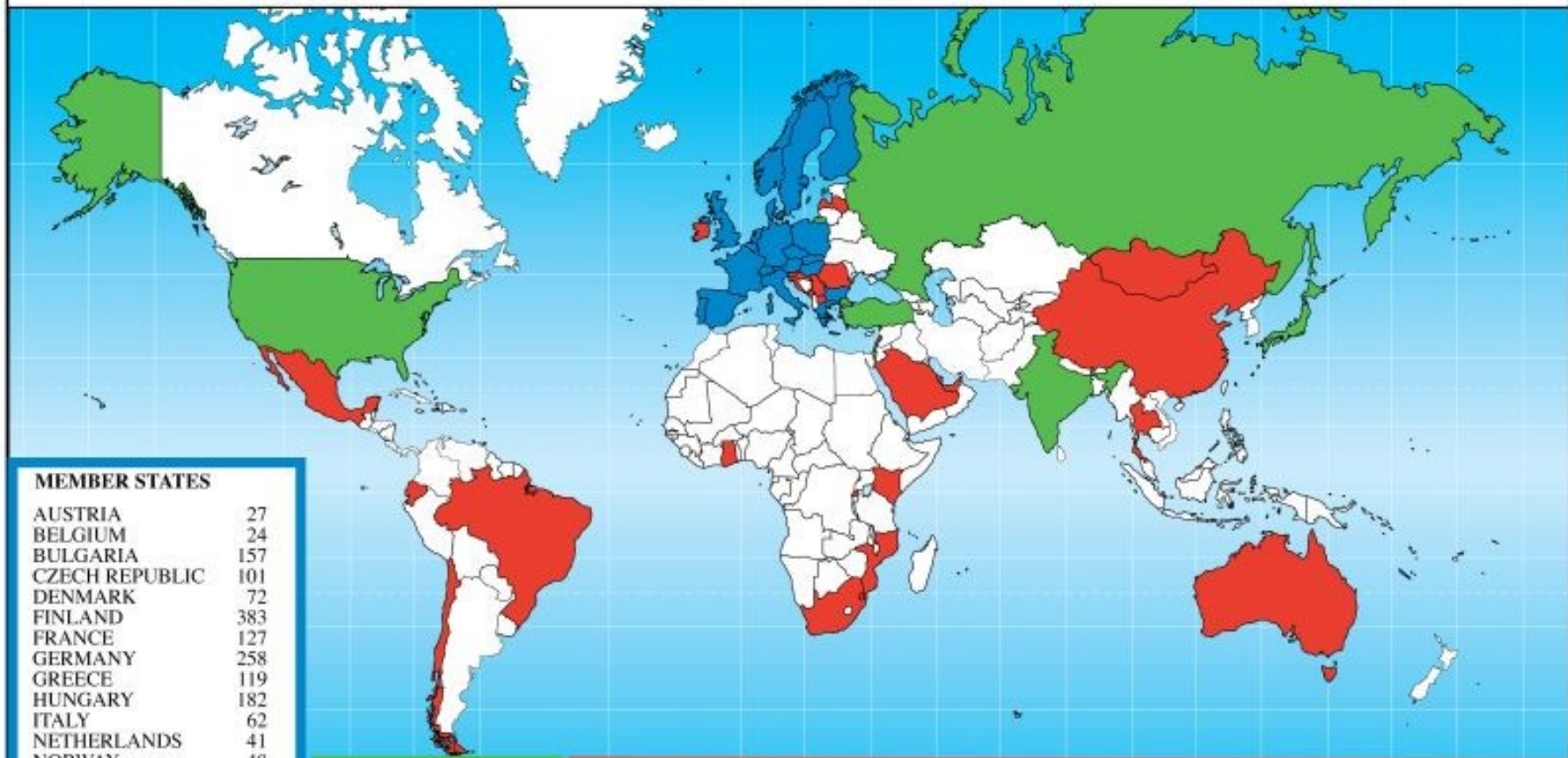


Outcome

- 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 - 31 July 2010



MEMBER STATES

AUSTRIA	27
BELGIUM	24
BULGARIA	157
CZECH REPUBLIC	101
DENMARK	72
FINLAND	383
FRANCE	127
GERMANY	258
GREECE	119
HUNGARY	182
ITALY	62
NETHERLANDS	41
NORWAY	48
POLAND	460
PORTUGAL	167
SLOVAKIA	189
SPAIN	168
SWEDEN	79
SWITZERLAND	12
UNITED KINGDOM	567

OBSERVER STATES

INDIA	2
ISRAEL	1
JAPAN	2
RUSSIA	48
TURKEY	2
USA	51

OTHERS

AUSTRALIA	1	IRELAND	3	MONTENEGRO	13	SLOVENIA	21
AZERBAIJAN	1	KENYA	1	MOZAMBIQUE	5	SOUTH AFRICA	6
BRAZIL	12	LATVIA	1	QATAR	1	SWAZILAND	1
CHILE	3	LEBANON	1	ROMANIA	7	THAILAND	2
CHINA	1	MACEDONIA	11	RWANDA	7	U.A.E.	1
CROATIA	1	MALTA	36	SAUDI ARABIA	1		
ECUADOR	1	MEXICO	5	SERBIA	10		
GHANA	2	MONGOLIA	1	SINGAPORE	2		

3243

106

158



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