

The background of the slide is a photograph of a mountainous landscape during the golden hour. In the foreground, a stone wall with crenellations runs across the bottom right. A classic street lamp with a glowing yellow light is mounted on a decorative black metal bracket on the right side. The sky is a mix of blue and orange, with soft clouds. The mountains in the distance are silhouetted against the bright sky.

The Erice International Science Journalism School

**B. Sciascia, INFN Frascati
on behalf of the organisers**



International Science Journalism School

What's Next: Challenges and Opportunities for Tomorrow's Fundamental Physics (June 24th-29th, 2018)

Director of the School:

Enzo Iarocci

Directors of the Course:

Pierluigi Campana & Claudia Di Giorgio
for Science and Journalism respectively

Adjunct Directors

Barbara Sciascia & Giovanni Spataro
for Science and Journalism respectively

Convener for Communication

Eleonora Cossi

School Secretary

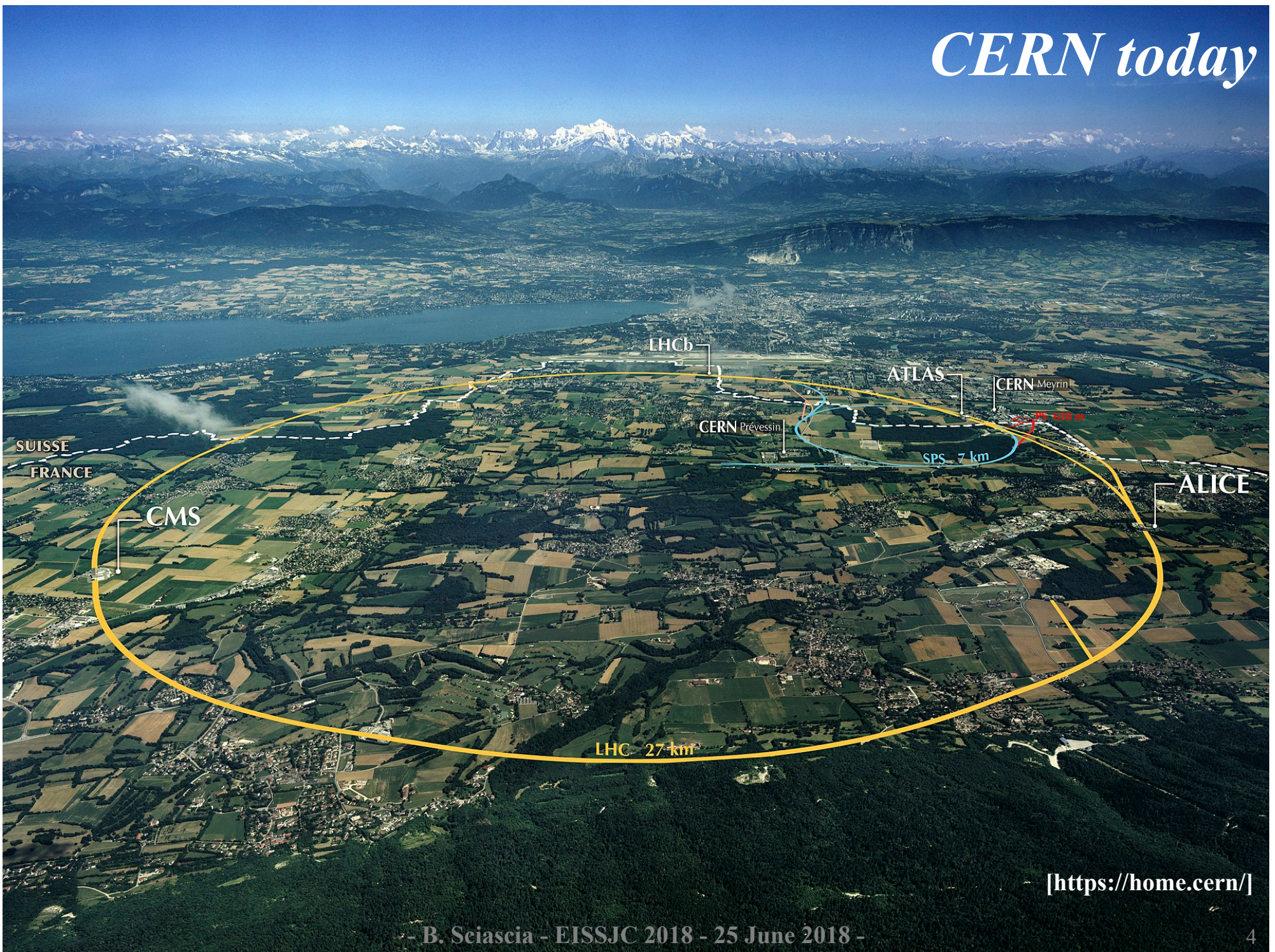
Rita Bertelli

When it “all” began

CERN’s origins can be traced back to the late 1940s. In the aftermath of the Second World War, a small group of visionary scientists (Raoul Dautry, Pierre Auger and Lew Kowarski in France, Edoardo Amaldi in Italy and Niels Bohr in Denmark were among these pioneers) and public administrators, on both sides of the Atlantic, identified fundamental research as a potential vehicle to rebuild Europe and to foster peace in a troubled region.

It was from these ideas that CERN was born on 29 September 1954, with a dual mandate to provide excellent science, and to bring nations together.

CERN today



[<https://home.cern/>]

When it “all” began



When it “all” began

1951

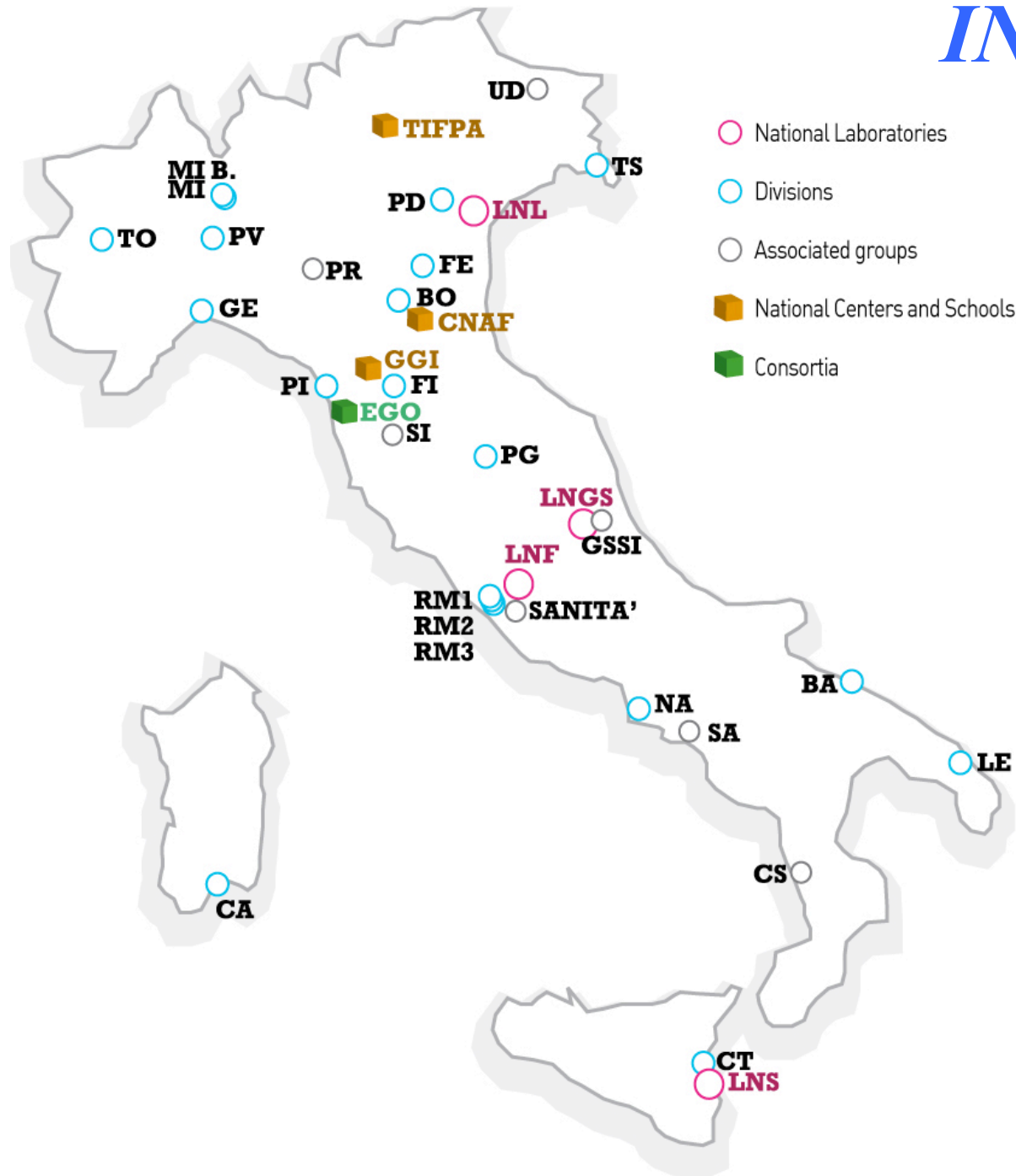
INFN was born from 4 Physics departments at Milano, Torino, Padova, and Roma Universities

1957

Laboratori Nazionali di Frascati



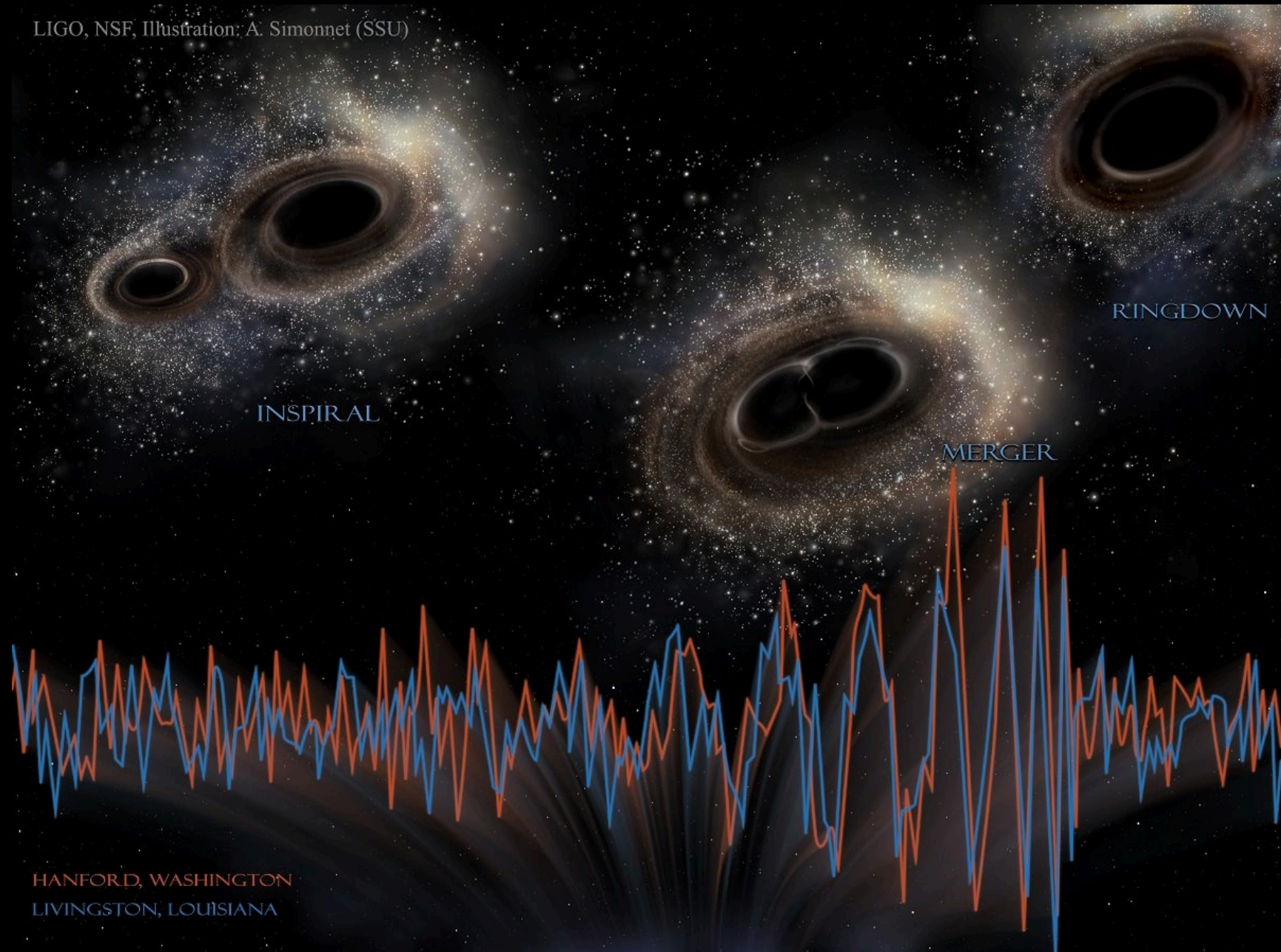
INFN today



[<http://home.infn.it/en/>]

Gravitational waves

LIGO, NSF, Illustration: A. Simonnet (SSU)



HANFORD, WASHINGTON
LIVINGSTON, LOUISIANA

Standard model

QUARK	up u	charm c	top t
carica elettrica 2/3			
	down d	strange s	beauty b
carica elettrica -1/3			

LEPTONI	ν_e	ν_μ	ν_τ
carica elettrica 0			
	e	μ	τ
carica elettrica -1			

MEDIATORI	gluone g
	fotone γ
	bosone W W^\pm
	bosone Z Z



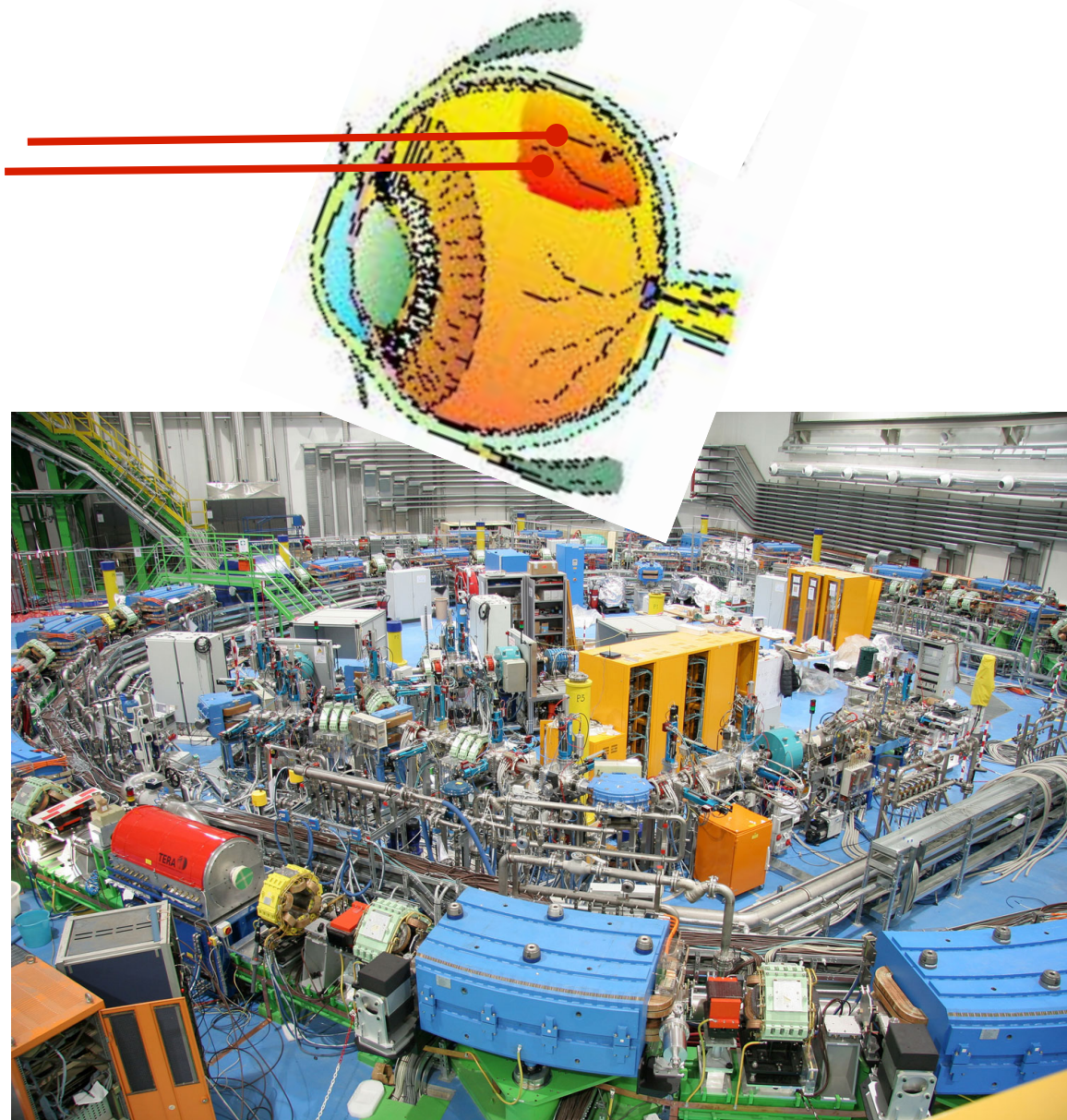
Credits: Asimmetrie

[<http://fortune.com/2016/06/09/web-fix-berners-lee/>]



[<https://evrythng.com/evrythng-engineers-visit-cern-birthplace-web/>]





New particles

Scoperta al Cern la particella Xi, inseguita da anni

Mai vista una simile, aiuta a capire colla che unisce la materia



Redazione ANSA

In un colpo solo, scoperte 5 nuove particelle al CERN da ricercatori italiani: è un record

...te scoperte, in una volta sole, cinque particelle da due italiani. Ecco di cosa si tratta.

391

Condividi

Physics ABOUT BROWSE PRESS COLLECTIONS

Synopsis: Pentaquark Discovery Confirmed

August 18, 2016

ence News

from research organizations

The LHCb experiment is charmed to announce observation of a new particle with two heavy quarks

Date: July 6, 2017

LHCb discovers family of tetraquarks

symmetry

Home > Fisica > Una nuova star è arrivata al CERN: il Pentaquark

Una nuova star è arrivata al CERN: il Pentaquark

Pentaquark: una scoperta che potrebbe darci informazioni sull'universo finora conosciuto

Science

'Indisputable' Proof Of A New Four-Quark Particle

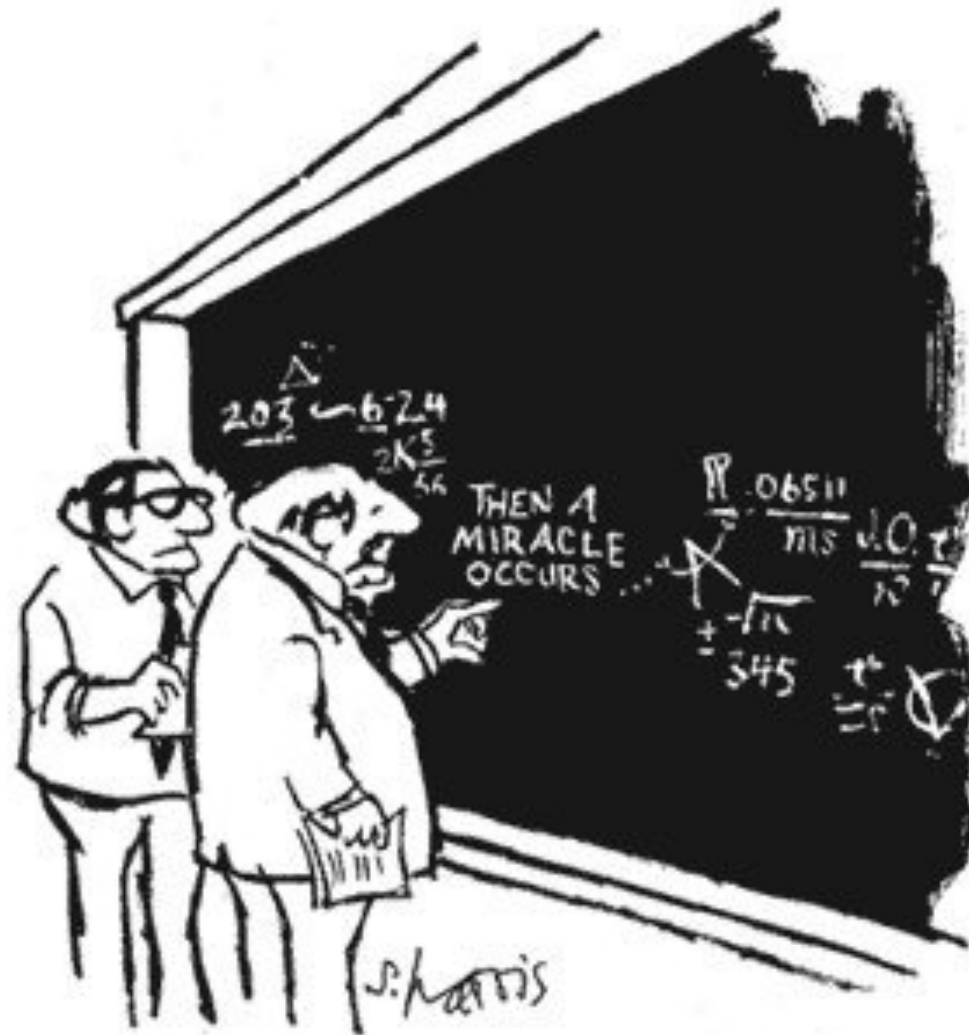
CERN physicists have made a particle that likely existed for just a microsecond after the Big Bang.

By Francie Diep April 10, 2014

- B. Sciascia - EISSJC 2018 - 25 June 2018 -

*What's Next:
Challenges and
Opportunities for
Tomorrow's
Fundamental Physics*

A foreword



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Program

Monday 25th	Tuesday 26th	Wednesday 27th	Thursday 28th
09,00 Welcome 09.10 The Erice Journalism School			
09,30-10,30 SL - Looking to cosmic messengers: new paradigms (M. Branchesi, GSSI)	09,30-10,30 SL - The search for the Universe missing matter (G. Servant, DESY)	09,30-10,30 SL - Who ordered that? Why scientists are continuing to search for new particles (G. Wilkinson, Oxford U.)	09,30-11,00 Interactive session (fellows contributions) - Country Stories: science communication /journalism in extra European countries
10,30-11,30 SL - Smaller, cheaper, simpler: accelerators for the future (R. Assmann, DESY)	10,30-11,30 ML - Art and craft of multimedia reporting (J. Pasotti, reporter)	10,30-11,30 ML - Toward a journalistic method in a digital world (M. Tedeschini Lalli, journalist)	
11,30-12,00 <i>Coffee Break</i>	11,30-12,00 <i>Coffee Break</i>	11,30-12,00 <i>Coffee Break</i>	11,00-11,30 <i>Coffee Break</i>
12,00-13,30 Interactive session - Responsible Research & Innovation: Umbrella in a European storm (F. Balvert, Erasmus U.)	12,00-13,00 ML - Covering hard science for a general public (R. McKie, The Observer)	12,00-13,00 SL - Coping with life complexity: the point of view of Physics (S. Morante, Tor Vergata U.)	11,30-13,00 Interactive session (fellows contributions) - Country Stories: science communication /journalism in European countries
13,30-15,00 <i>Lunch</i>	13,00-14,30 <i>Lunch</i>	13,00-14,30 <i>Lunch</i>	13,00-14,30 <i>Lunch</i>
15,00-17,00 - MediaLab/Interactive session Keep calm & hit the target (E. Cossi, C. Di Giorgio, G. Spataro)	14,30-15,30 SL - Multidisciplinary science from the deep sea exploration (J. Danobeitia, EMSO)	Afternoon free	14,30-15,30 SL - Big data for big science and better society (M. Girone, CERN)
	15,30-16,30 ML - Communication Trends in Research Infrastructures (A. Weeks, ESS-ELI)		
17,00-17,30 <i>Coffee Break</i>	16,30-17,00 <i>Coffee Break</i>		15,30-16,30 ML - Science solo show (H. Keen, comedian and performer)
17,30-18,30 MediaLab/Interactive session Lab conclusions	17,00-18,30 Interactive session (c. Di Giorgio, G. Spataro) Hot issues in science journalism & communication (embargo, journalist or activist?, new trends)		16,30-17,00 <i>Conclusions</i>