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### Science for peace CERN was founded in 1954 with 12 European Member States



CERN was the result of a common vision of scientists and political leaders in post-war Europe, and the first scientific IGO, motivated by the wish to

- Renew peaceful collaboration between European States
- focus on fundamental scientific research at a scale beyond the capacity of any single nation
- restore scientific excellence in Europe
- reverse and prevent brain drain to USA



### **Open Questions!**

Origin of mass? Nature of Dark Matter? Matter versus antimatte? Primordial plasma ie matter state at BB?

Present Day Acceleration

NET WT ???

Dark Matter Cereal. One of the touches of humor in the book is this cartoon courtesy of NASA.

**Big Bang** 

Inflation

Expansion

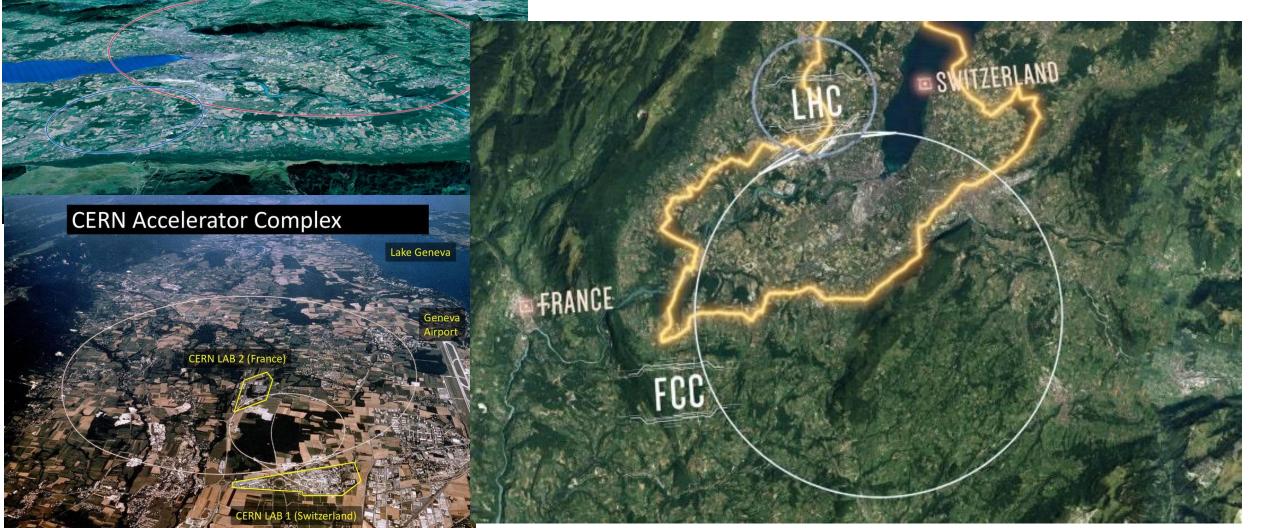
#### Big Science, Global research infrastructures like CERN, and science diplomacy



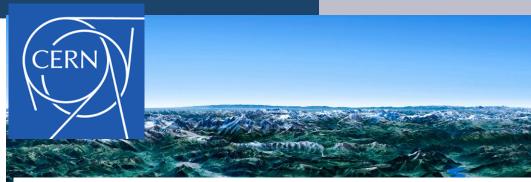


As research projects become progressively more multidisciplinary and technology advances, the need for efficient and accessible research infrastructures is growing for all scientific disciplines - National and International

## Scientific priorities at CERN



CERN



# Scientific priorities at CERN

- The role of global research infrastructures in science diplomacy
- CERN's origins political, diplomatic, and scientific entanglements
- CERN's model goals and governance structure
- CERN initiatives aimed at advocating the role of science in the international community and strengthening its relations with policy makers
- CERN's contribution to the definition and implementation of the 2030 UN Agenda for Sustainable Development
- CERN's relations with national parliaments
- CERN approach in helping decision-making areas with science evidence-based recommendations that do not rely just on the interests of specific countries. The CERN model promoting the intercultural dialogue in different fields