

Annual Meeting of Swiss School Labs 2024

Welcome to CERN & CERN Science Gateway!



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What does *CERN* stand for ?

Conseil
Européen pour la
Recherche
Nucléaire

European
Council for
Nuclear
Research

1953

Member States

Budget (2023)
1.2 billion CHF

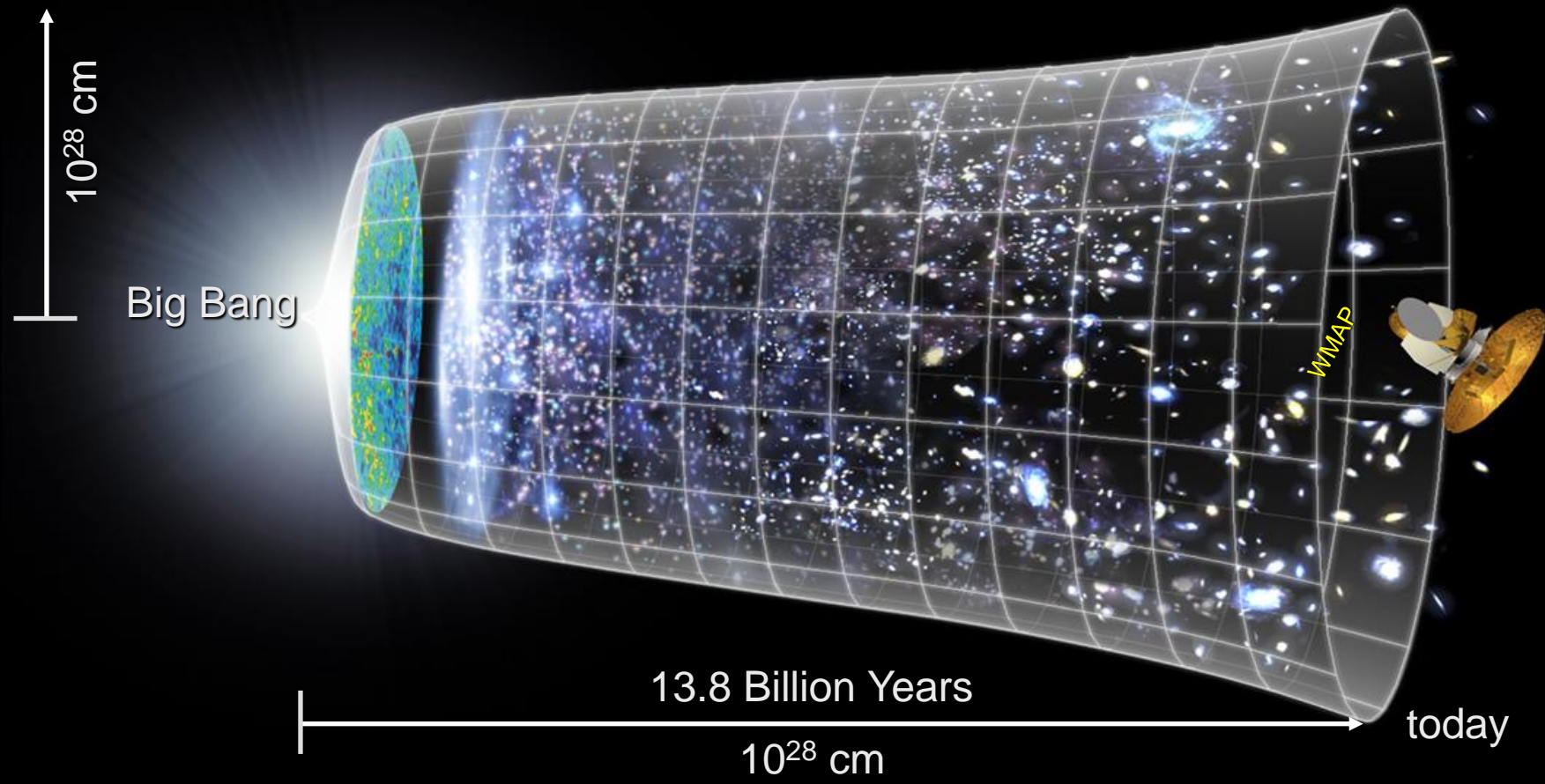


- | | |
|--|---|
|  Austria (1959) |  Sweden (1953) |
|  Belgium (1953) |  Switzerland (1953) |
|  Bulgaria (1999) |  United Kingdom (1953) |
|  Czech Republic (1993) | States in accession to Membership and Associate Members |
|  Denmark (1953) |  Brazil (2024) |
|  Finland (1991) |  Croatia (2019) |
|  France (1953) |  Cyprus (2016) |
|  Germany (1953) |  Estonia (2021) |
|  Greece (1953) |  India (2017) |
|  Hungary (1992) |  Latvia (2021) |
|  Israel (2014) |  Lithuania (2018) |
|  Italy (1953) |  Pakistan (2015) |
|  Netherlands (1953) |  Slovenia (2017) |
|  Norway (1953) |  Turkey (2015) |
|  Poland (1991) |  Ukraine (2016) |
|  Portugal (1986) | |
|  Romania (2016) | |
|  Serbia (2019) | |
|  Slovakia (1993) | |
|  Spain (1961-1968, 1983-) | |

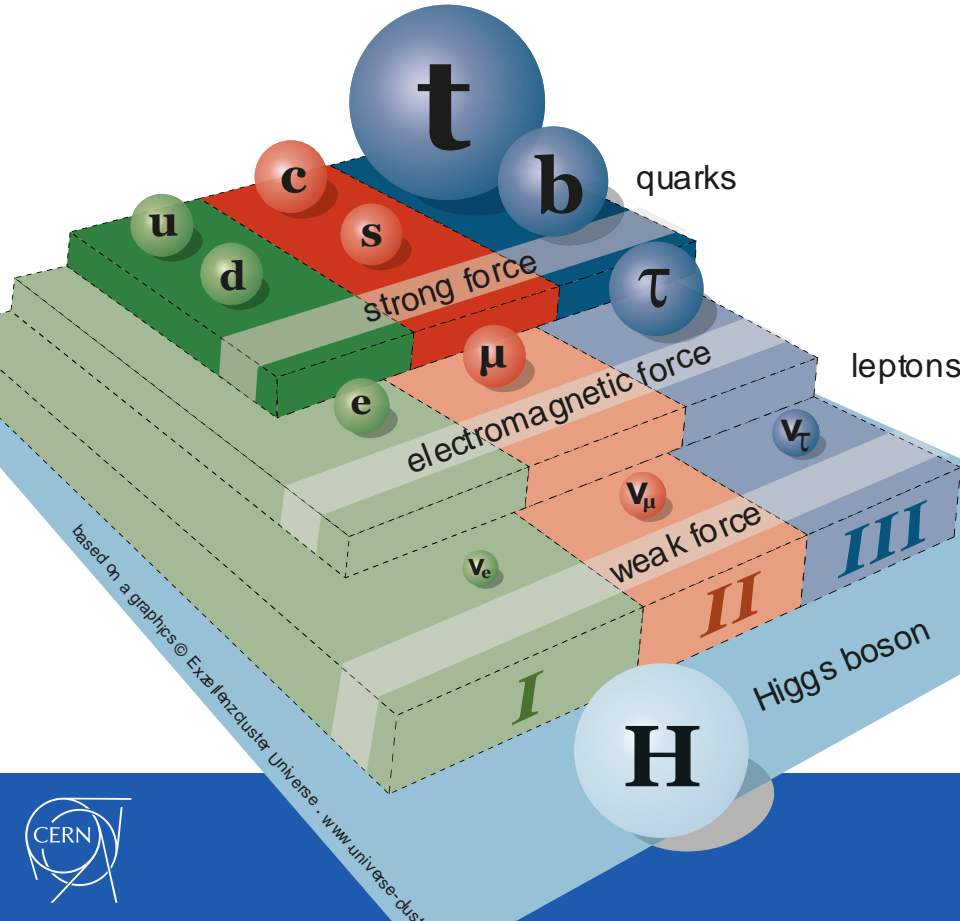


The Scientific Challenge

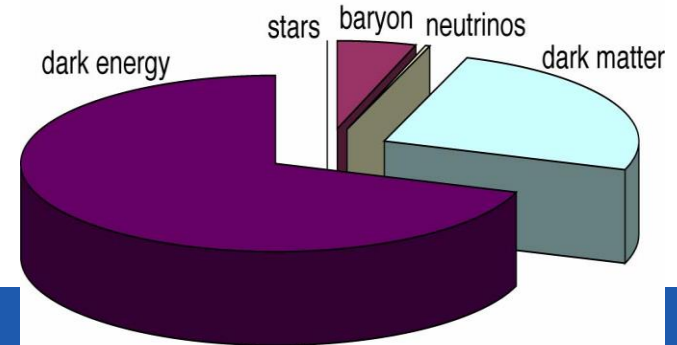
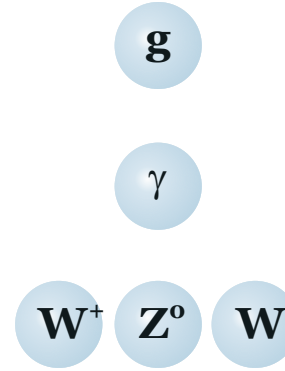
Research on the Development of the Universe



Standard Model of Particle Physics

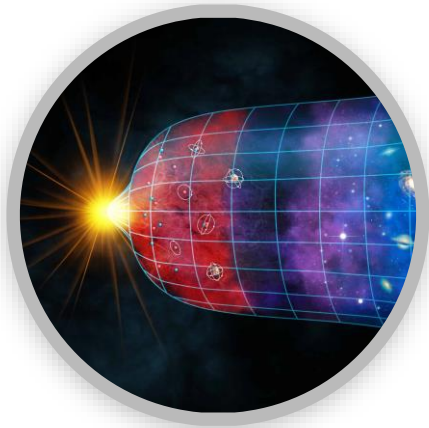


force carriers



R Research Questions

Early Universe



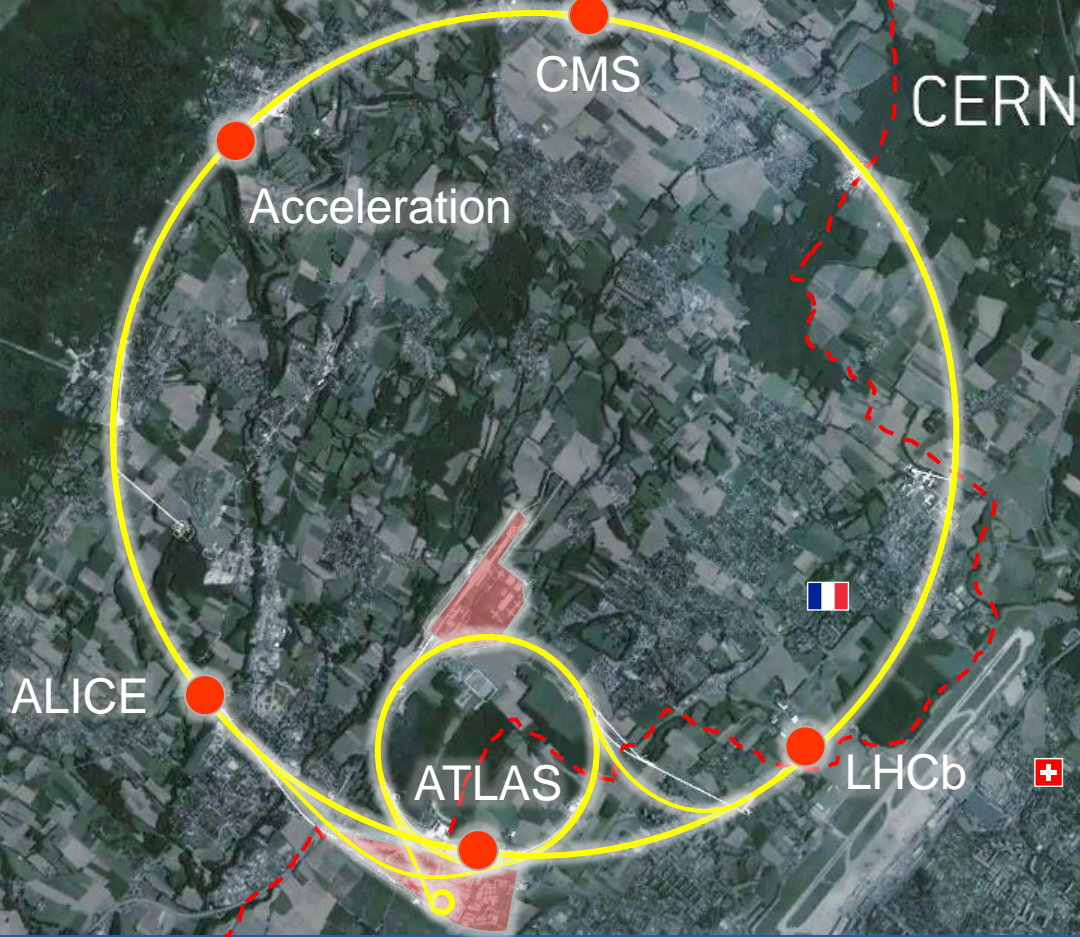
Anti-Matter

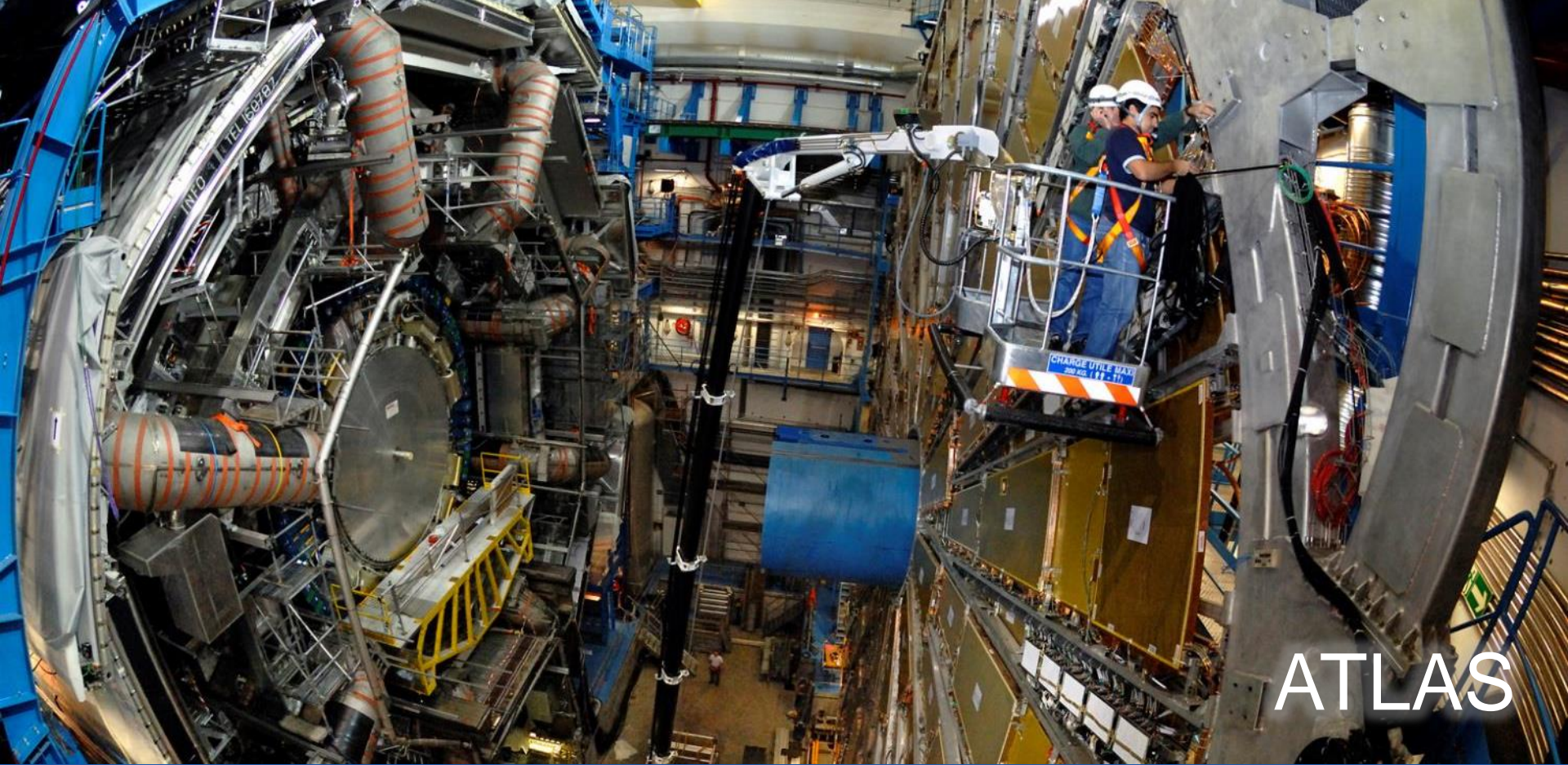


Dark Matter



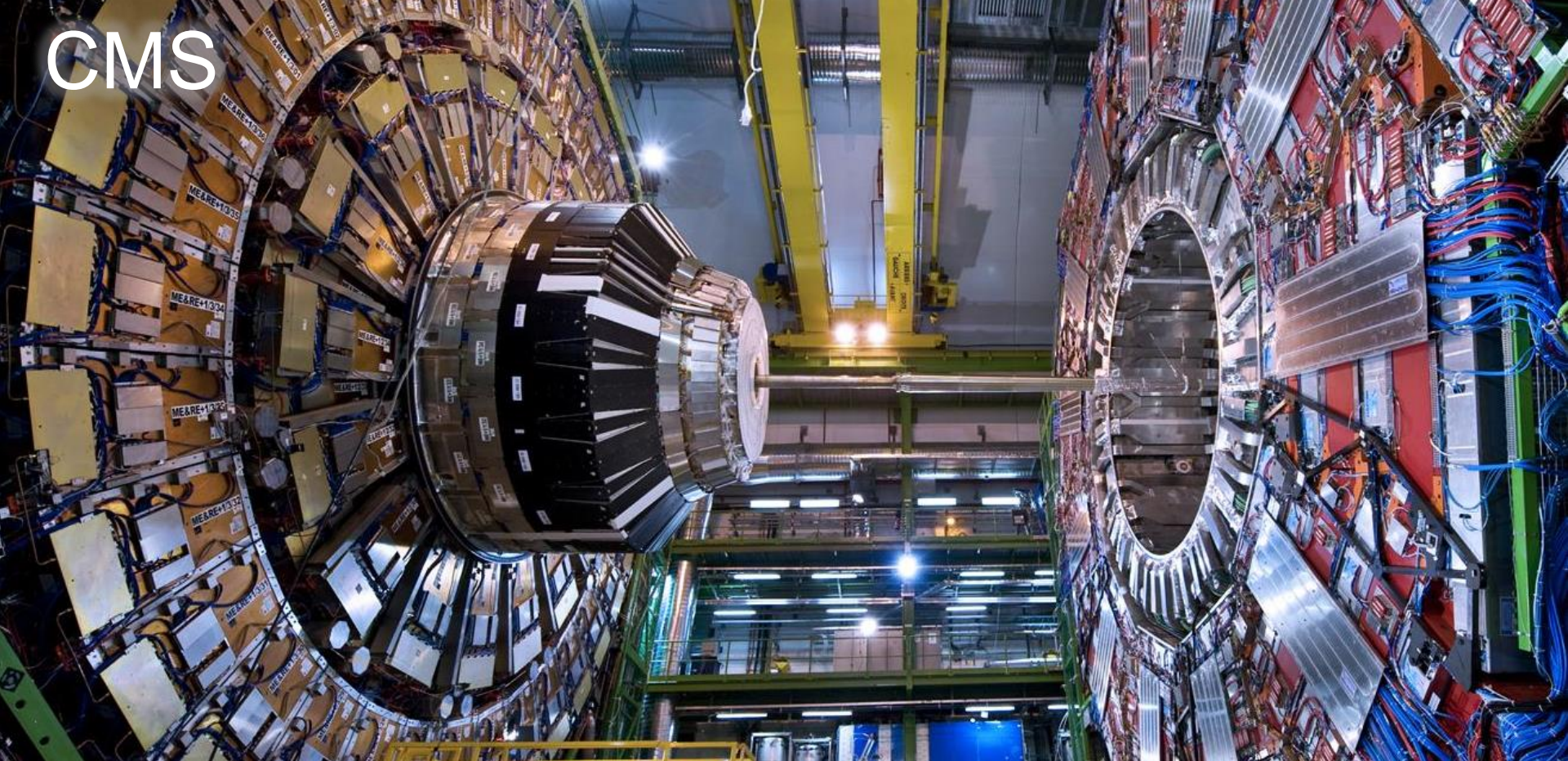
Largest machine on Earth



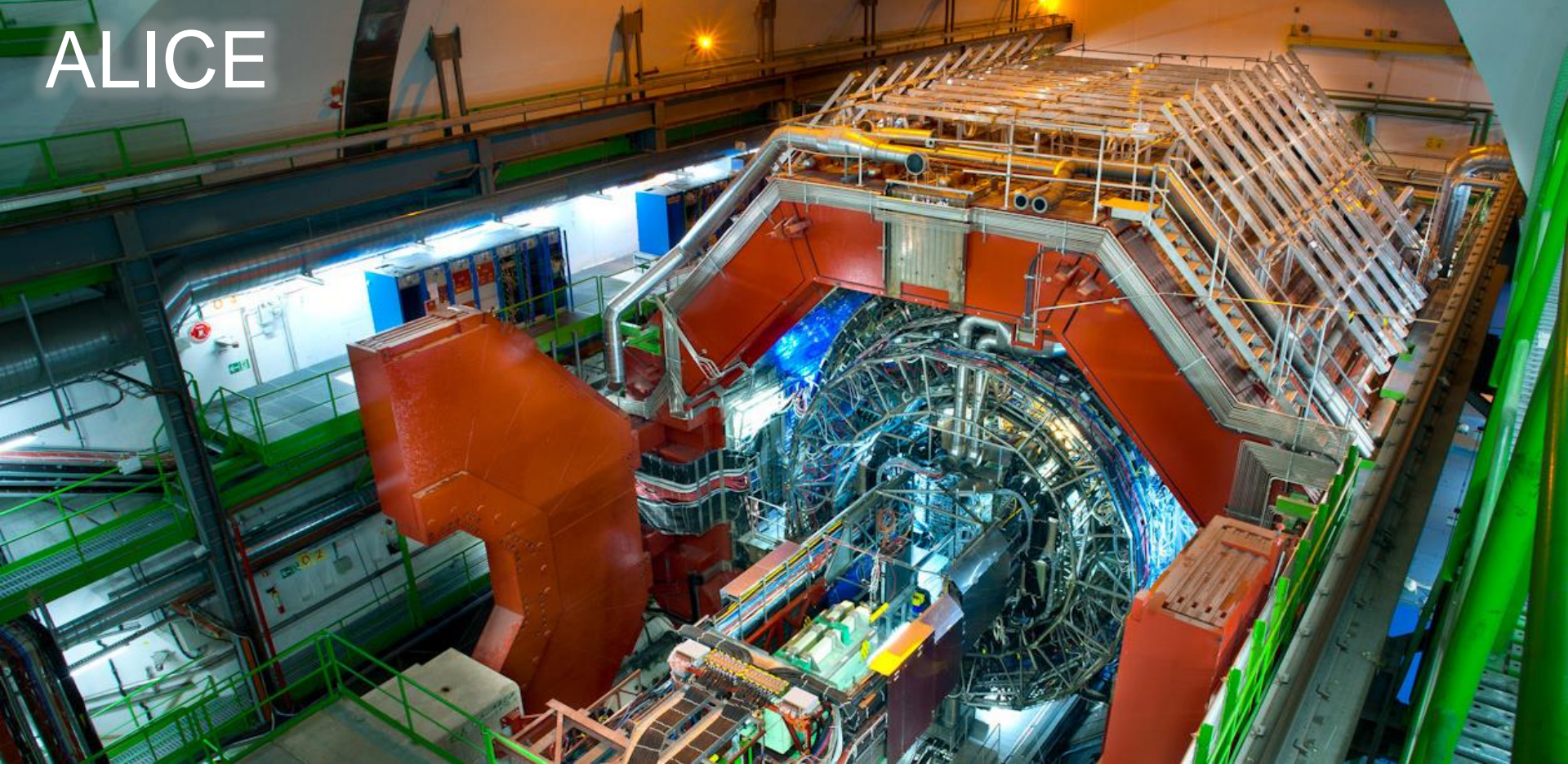


ATLAS

CMS



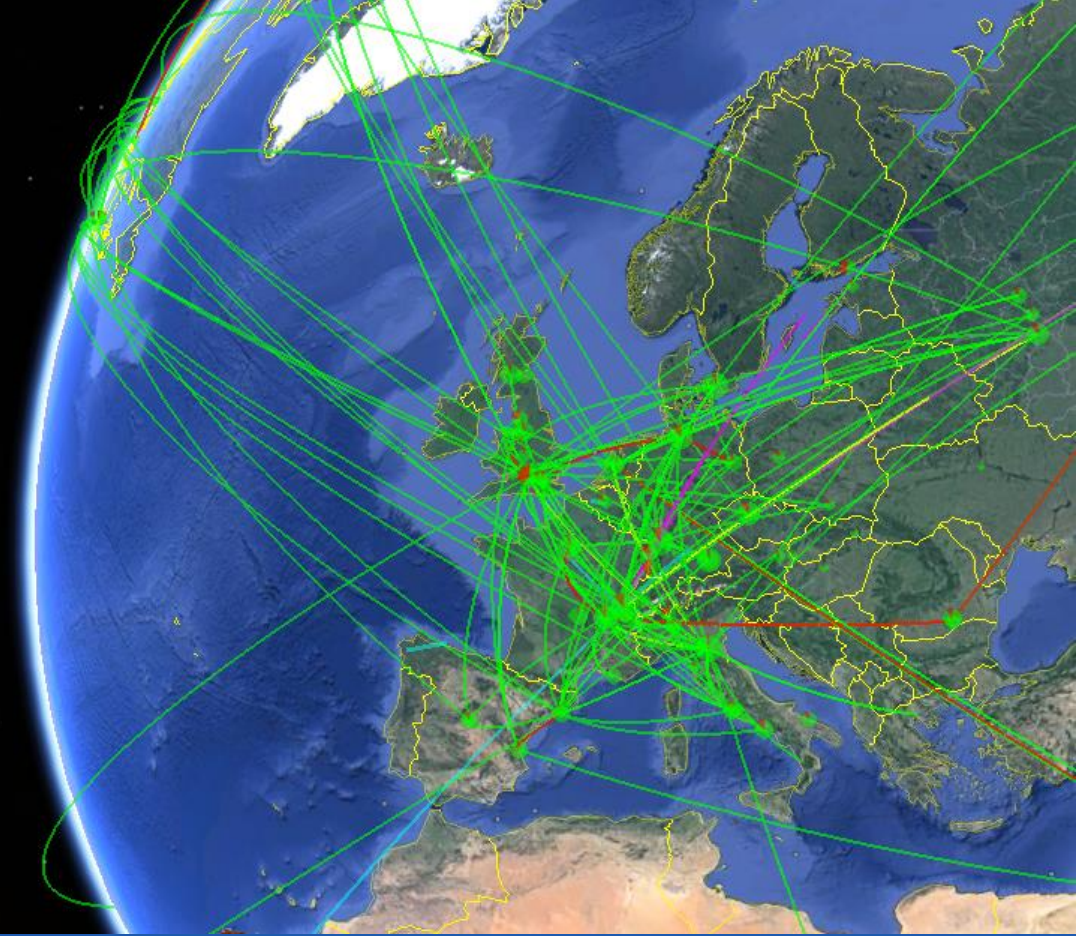
ALICE





LHCb

The largest computing grid



World Wide Web

WWW





CERN Science Gateway



We are here

Globe

Auditorium

Labs

Exhibitions





2 Modular Labs

- Discover your inner scientist
- Get hands-on with the science and technologies of CERN
- Focus on independent experimentation and teamwork
- 24 participants per workshop
- For ages 5 and up
- 45-90 min

Portfolio of Lab Workshops



Participants in Lab Workshops

- 20 000 per year (expected)
 - 50% school groups (5-19y)
 - 40% families & individuals
 - 10% teacher groups & other
- >30 countries & languages
- Facilitated by volunteering guides from CERN's (scientific) community with the support of the labs team (\approx 4 people)



Today's programme

<https://indico.cern.ch/e/SSL24>