



# CERN

Introduction Welcome

Kunstakademie Karlsruhe May 2024



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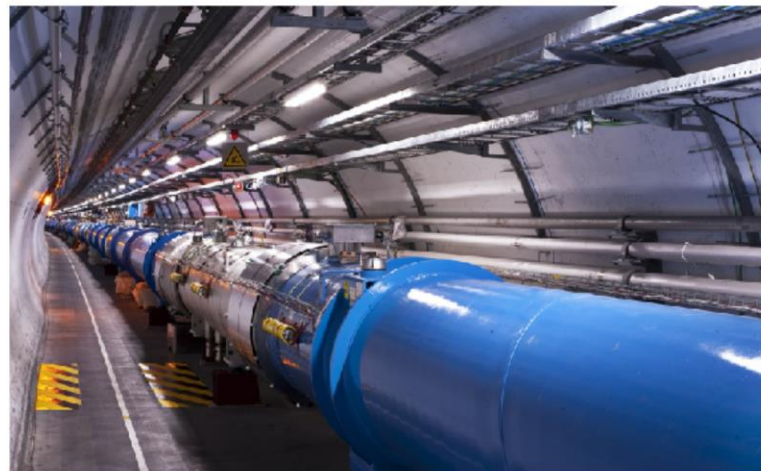
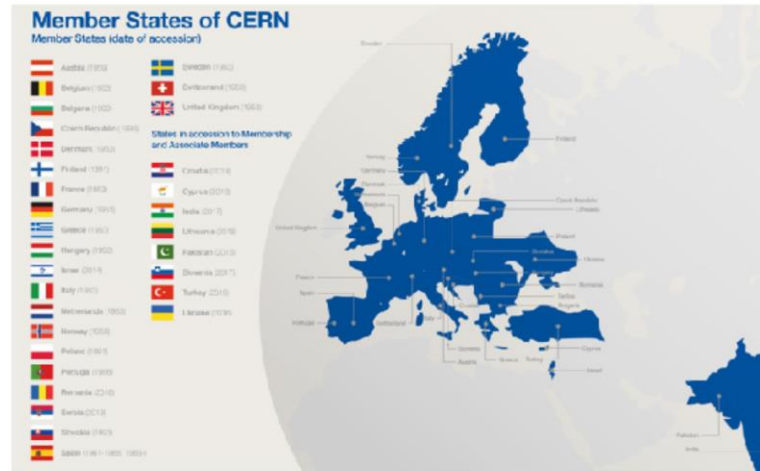
# Conseil Européen pour la Recherche Nucléaire

International **C**ollaboration

**E**ducation

Fundamental **R**esearch

**N**ew Technology



# History

**1949**

First steps towards civilian research in the field of nuclear technology

**1952**

Foundation of CERN under the auspices of UNESCO in Geneva

**1953**

Signing of the CERN charta

**1954**

Completion of the ratification process of the 12 Member States

La sixième session du Conseil fut organisée à Paris du 29 juin au 1<sup>er</sup> juillet 1953. C'est à cette occasion que la Convention établissant l'Organisation fut signée, sous réserve de ratification, par douze Etats membres.

For the German Federal Republic Für die Republik Föderale d'Allemagne <i>K. Heisenberg</i> subject to ratification	For the Kingdom of Norway Pour le Royaume de Norvège Subject to ratification 27/12/1953. <i>W. Rindby</i>
For the Kingdom of Belgium Pour le Royaume de Belgique <i>J. Huttenlocher</i> sous réserve de ratification	For the Kingdom of the Netherlands Pour le Royaume des Pays-Bas <i>H. W. van den Broek</i> subject to ratification
For the Kingdom of Denmark Pour le Royaume de Danemark <i>B. Blocher</i> sous réserve de ratification	For the United Kingdom of Great Britain and Northern Ireland Pour le Royaume-Uni de la Grande-Bretagne et de l'Irlande du Nord <i>R. B. Robinson</i> subject to ratification
For the French Republic Pour la République Française <i>René Barthelemy</i> sous réserve de ratification	For the Kingdom of Sweden Pour le Royaume de Suède <i>Torsten Gustafsson</i> Subject to ratification
For the Kingdom of Greece Pour le Royaume de Grèce <i>N. Kambouris</i> sous réserve de ratification	For the Confederation of Switzerland Pour la Confédération Suisse <i>S. L. J. de Saclé</i> sous réserve de ratification
For Italy Pour l'Italie <i>Antonio Penella</i> sous réserve de ratification	For the Federal People's Republic of Yugoslavia Pour la République Fédérative Populaire de Yougoslavie <i>Paulo Janićić</i> sous réserve de ratification

The Sixth Session of the CERN Council took place in Paris on 29 June—1 July 1953. It was here that the Convention establishing the Organization was signed, subject to ratification, by twelve States.

# Member States of CERN

Member States (date of accession)

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

## States in accession to Membership and Associate Members

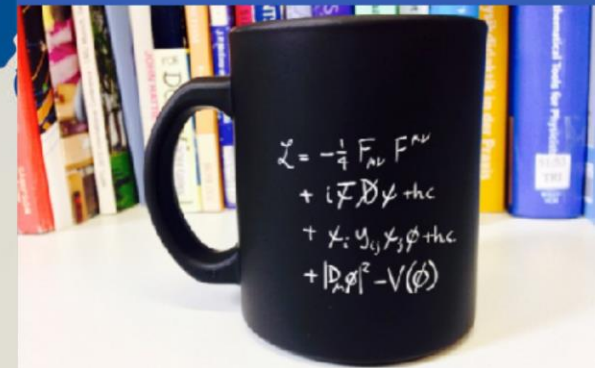


# CERN Today

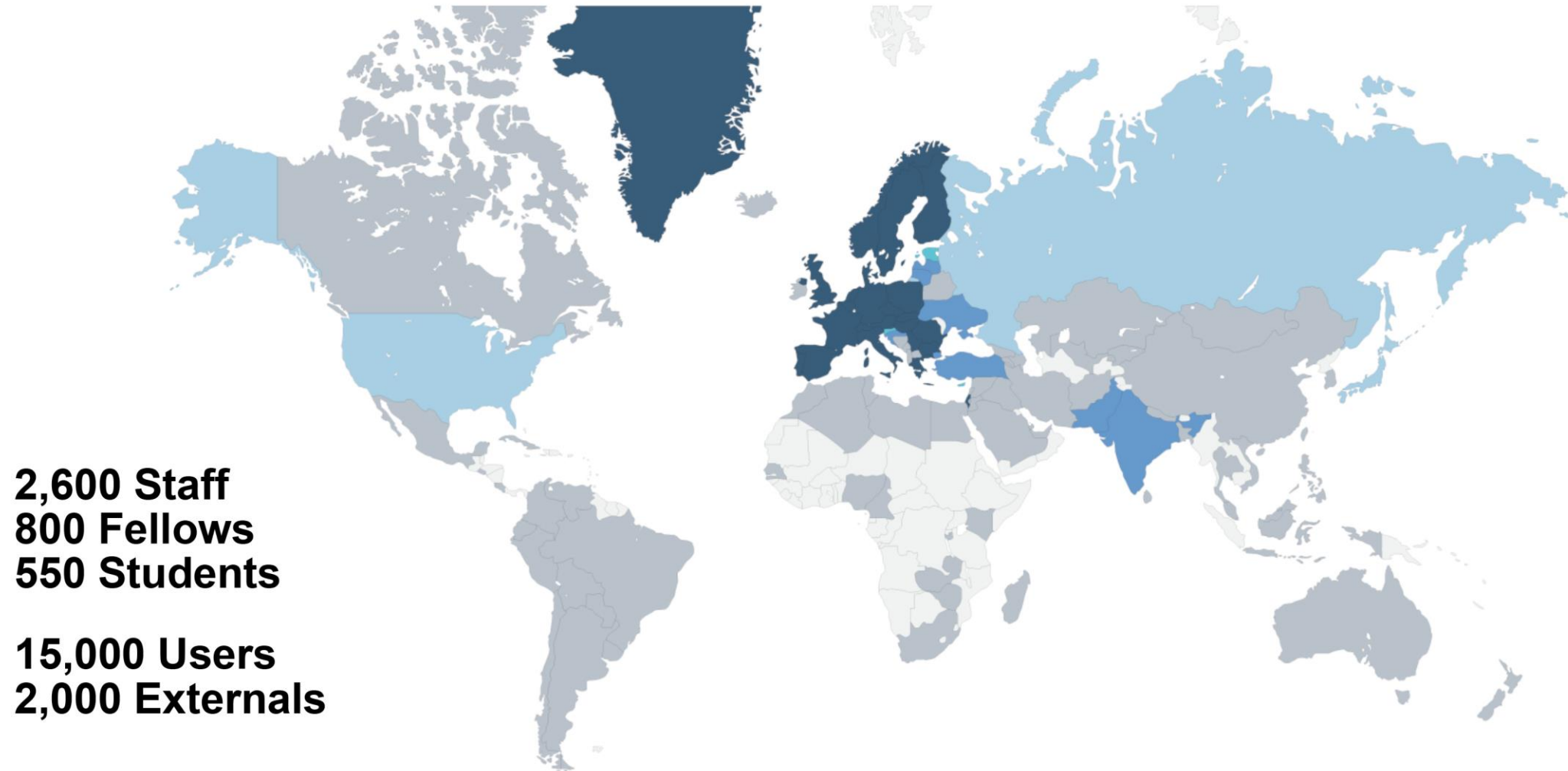
23 Member States

11 Associate Member States

Annual budget  
**1.2 billion CHF**  
*1.2 billion EUR*  
*1.3 billion USD*



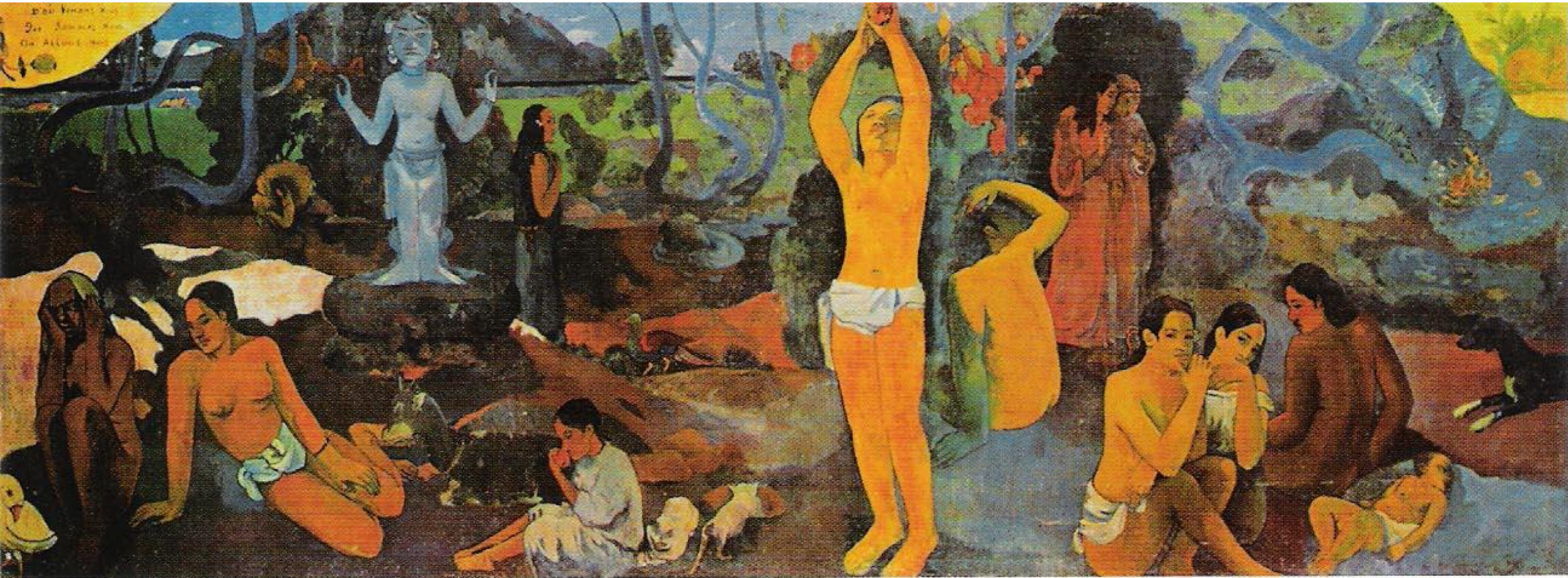
# More than 20,000 scientists from around the world



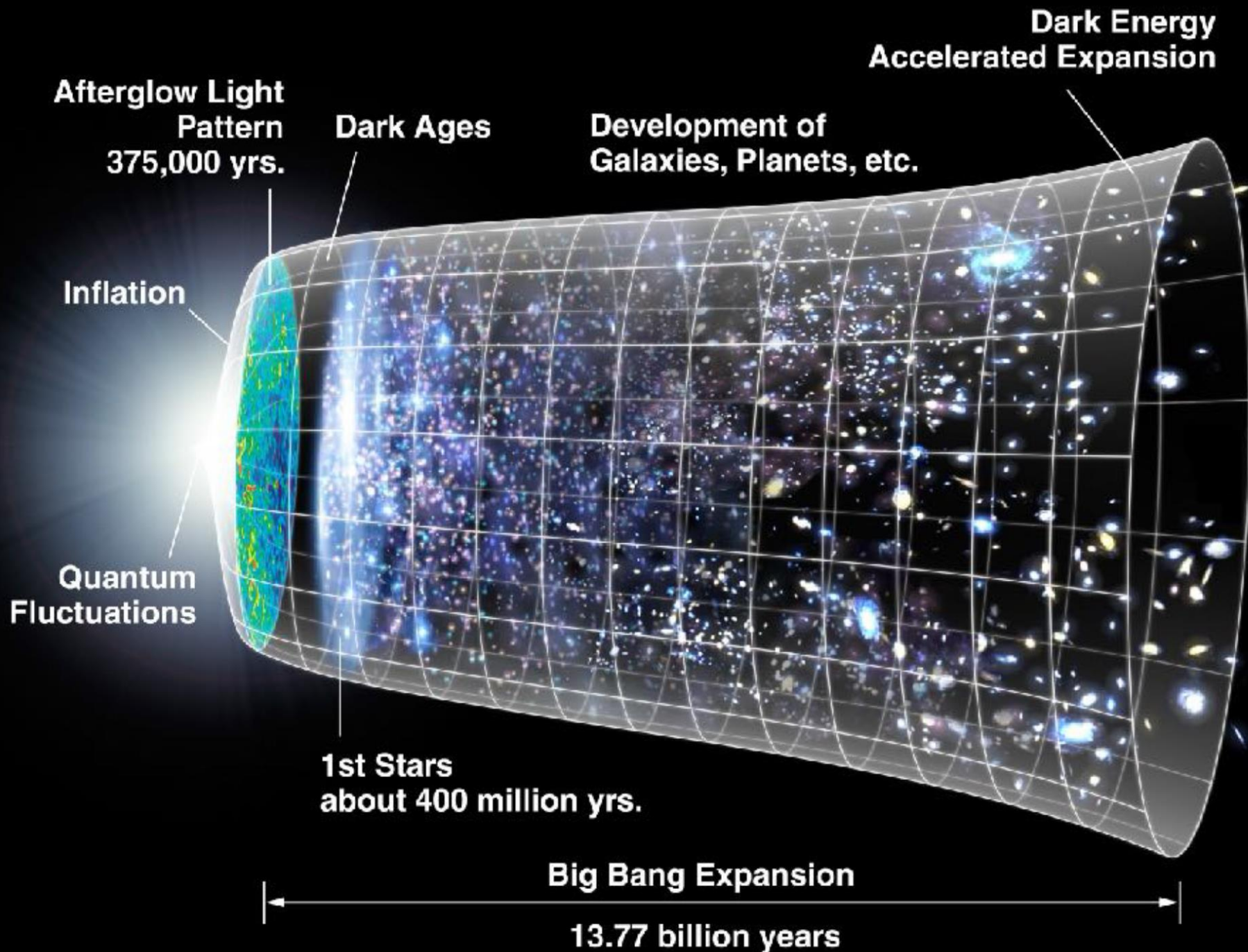
# Fundamental Questions of mankind

Paul Gauguin 1897:

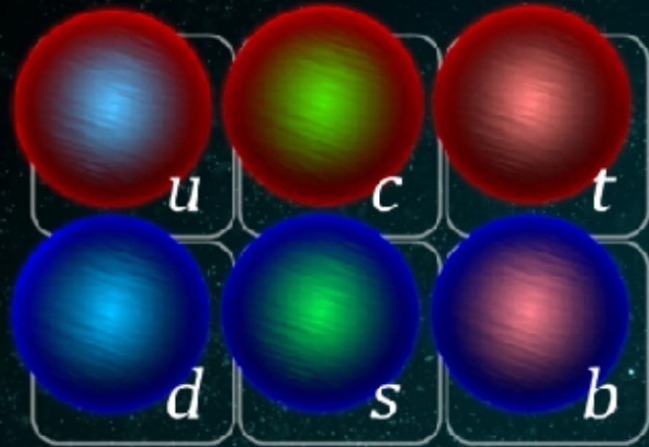
**Where did we come from? Who are we? Where are we going?**



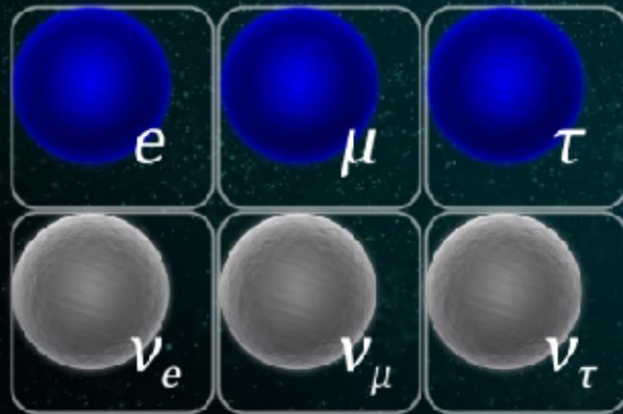
# WHERE do we come FROM



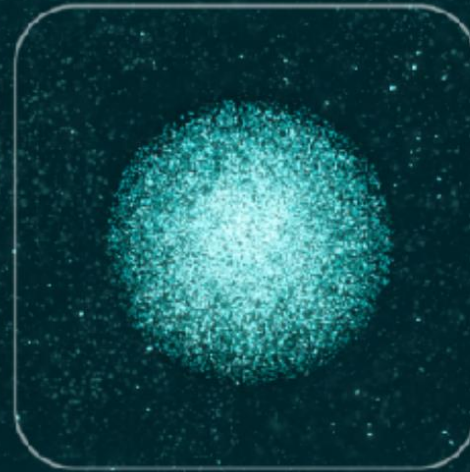
# WHAT are we MADE OFF



Quarks



Leptons



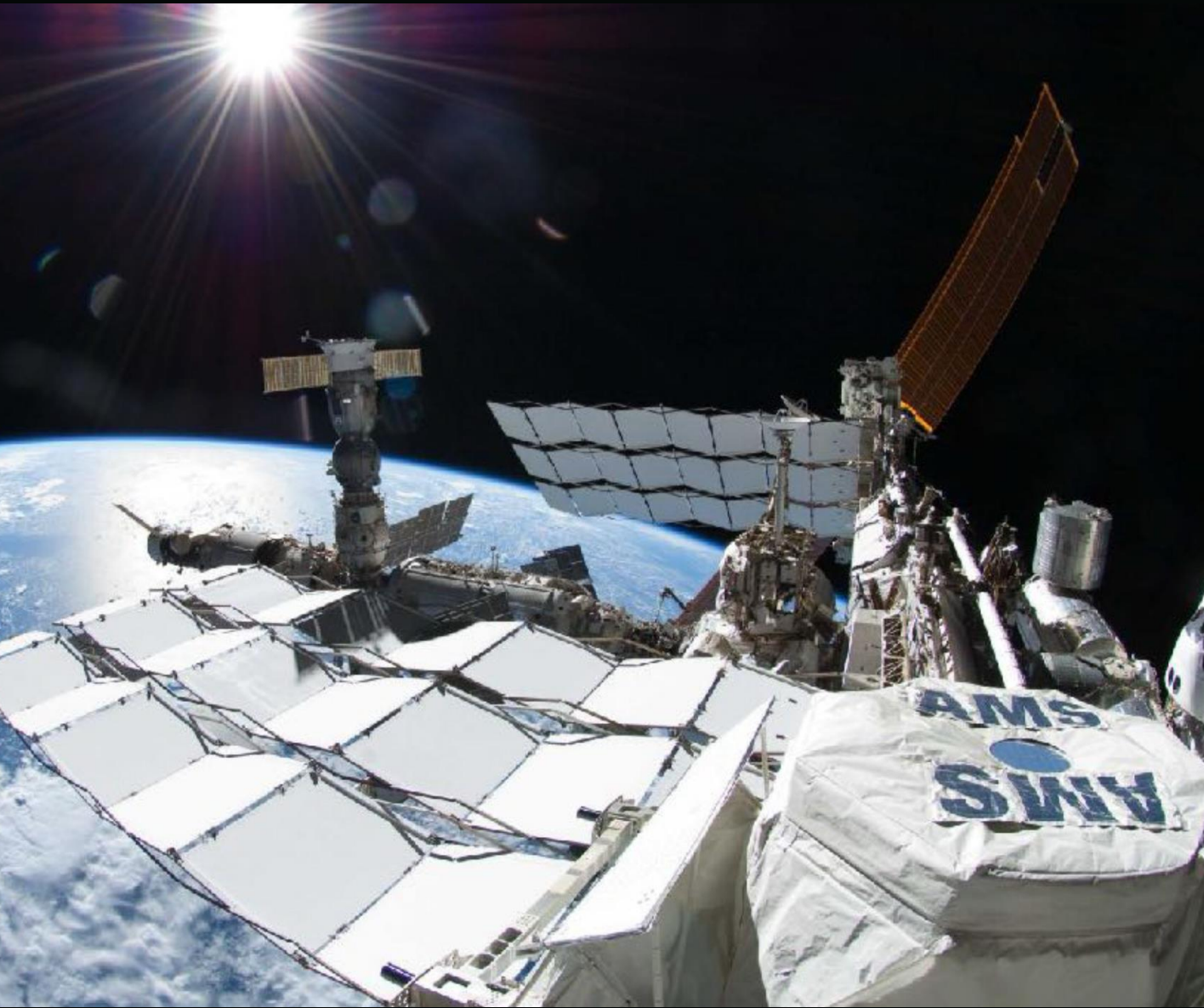
Higgs boson

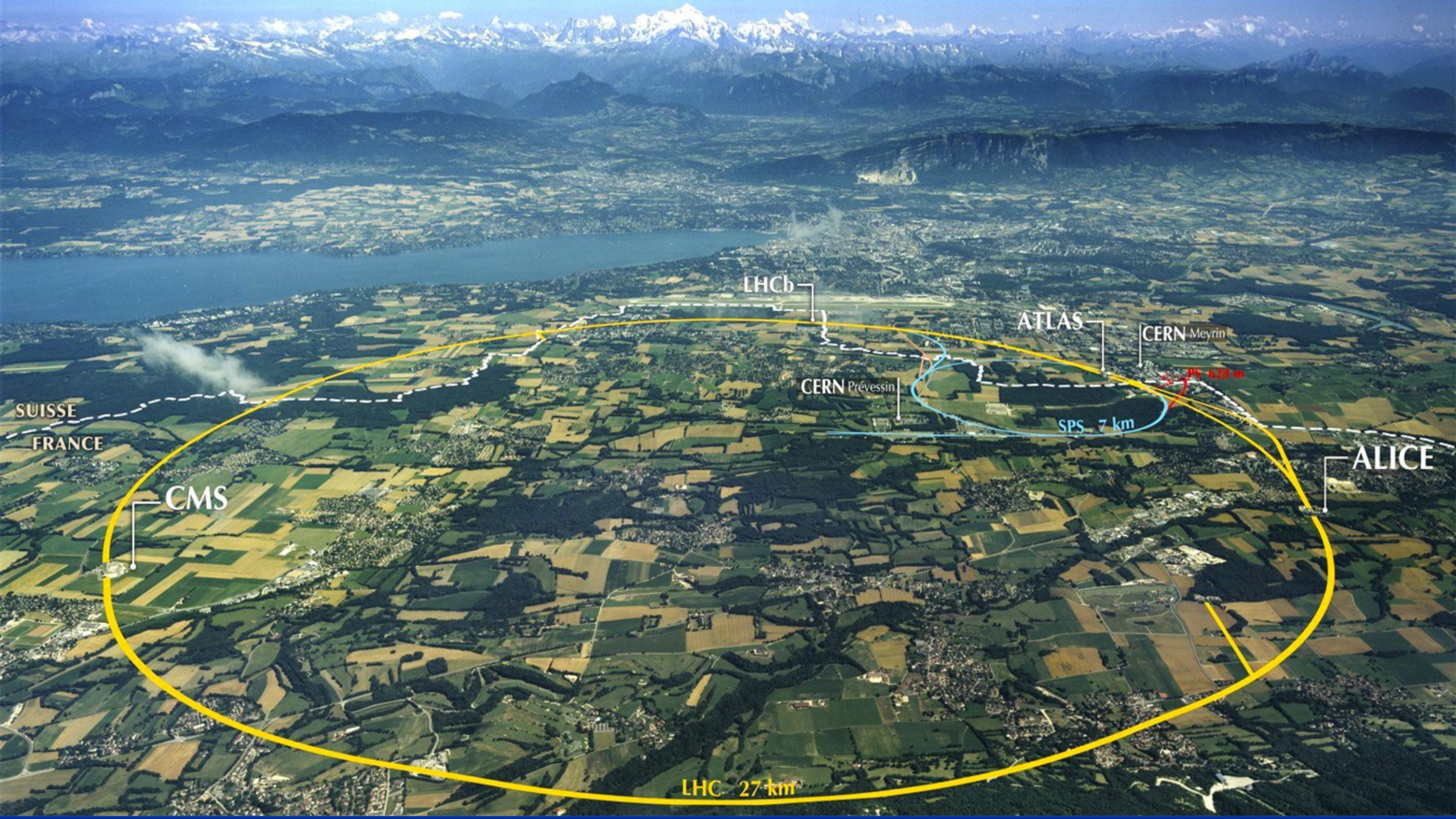


Forces



# WHERE are we GOING





SUISSE  
FRANCE

CMS

LHCb

ATLAS

CERN Meyrin

PS 4.28 km

CERN Preessin

SPS 7 km

ALICE

LHC 27 km

