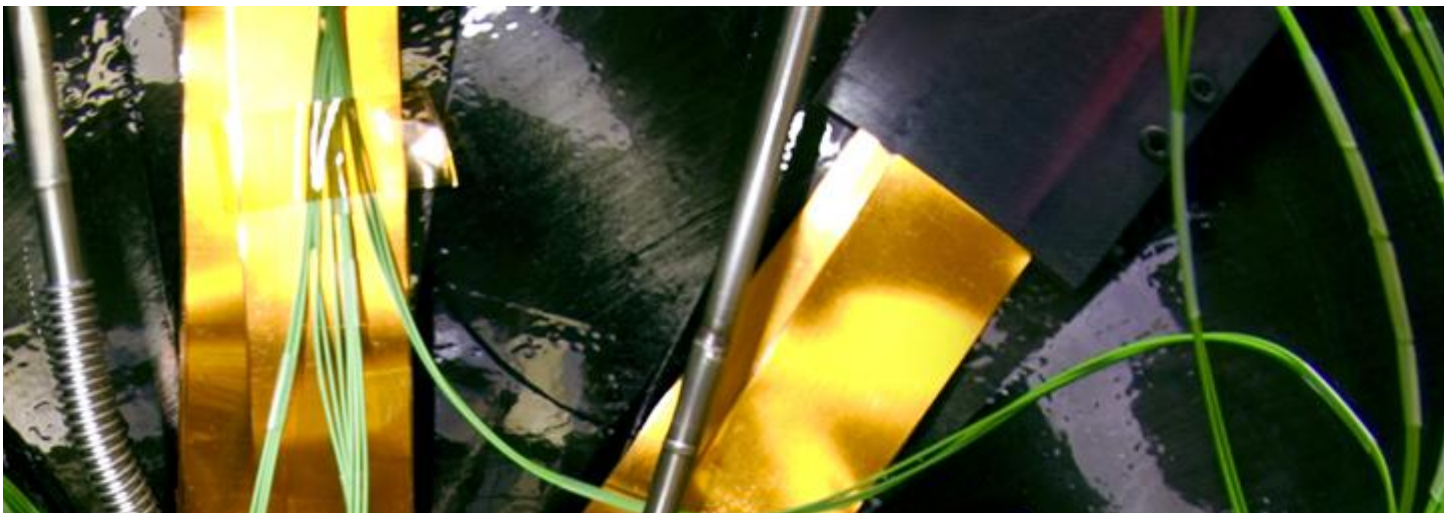


ALICE (A Large Ion Collider Experiment) is a detector dedicated to heavy-ion physics at the Large Hadron Collider (LHC). It is designed to study the physics of strongly interacting matter at extreme energy densities, where a phase of matter called quark-gluon plasma forms.

All ordinary matter in today's universe is made up of atoms. Each atom contains a nucleus composed of protons and neutrons (except hydrogen, which has no neutrons), surrounded by a cloud of electrons. Protons and neutrons are in turn made of quarks bound together by other particles called gluons. No quark has ever been observed in isolation: the quarks, as well as the gluons, seem to be bound permanently together and confined inside composite particles, such as protons and neutrons. This is known as confinement.

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The ALICE collaboration uses the 10 000-tonne ALICE detector – 26 m long, 16 m high, and 16 m wide – to study quark-gluon plasma. The detector sits in a vast cavern 56 m below ground close to the village of St Genis-Pouilly in France, receiving beams from the LHC.

The collaboration includes almost 2000 scientists from 174 physics institutes in 40 countries (April 2022).



Explore the Control Room for the ALICE experiment through Google Street View (Image: Google Street View)

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