“What’s Next in Particle Physics? – Experimental Perspective”

Particle physics is focused on the search for the most basic building blocks of the Universe and the rules that bind them. The CERN Large Hadron Collider (LHC), located near Geneva, Switzerland is the world's most powerful particle accelerator, able to reach the highest particle energies in a laboratory setting. Over the last five decades, many outstanding questions in particle physics have been answered, leading to the Standard Model (SM) and its spectacular confirmation with the discovery of the Higgs boson in 2012, which would supply the heart to this theory. Now the hunt is on for a deeper theory of reality. To answer this question, Europe, Japan, the US and China have proposed plans for building new particle colliders focused on studying the Higgs boson. Higgs’ legacy will be the experimental particle physics programme of the 21st century. The open questions of today are just as profound as they were a century (or a century and a half) ago. However, there appears to be many more of them. We must take a holistic view of particle physics - whether we find Beyond Standard Model physics at the LHC or not - and select the path to follow in a prudent