

European Committee for Future Accelerators

# Does the World need a new particle collider – and why?

Public talk and round table discussion

## The Higgs boson: particle superhero and tour guide to new particles

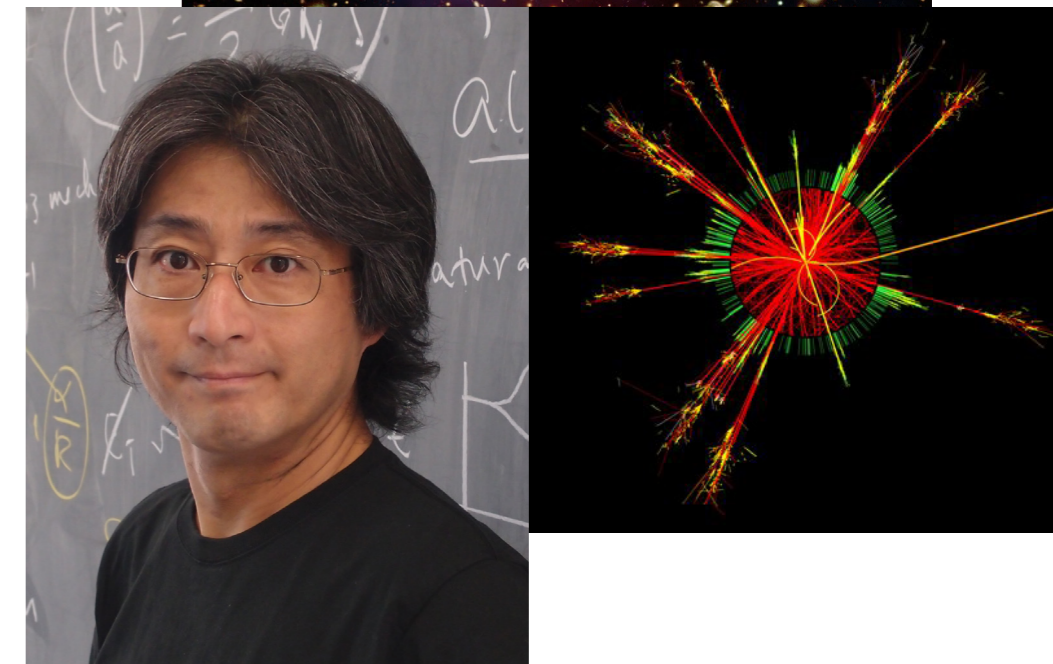
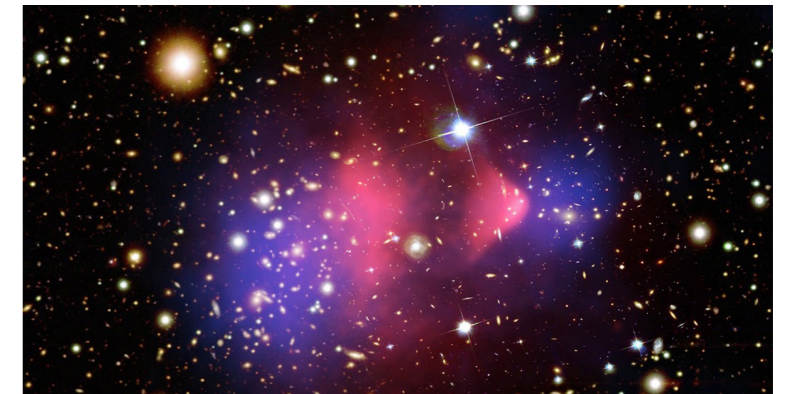
The Higgs boson, discovered at the world's largest particle collider LHC ten years ago, is a very special particle. We need to study it in great detail to answer key questions of physics. The Higgs boson may have been a superhero that saved us from complete annihilation and it can be the portal to a new world of particles with possible links to dark matter and dark energy.

This lecture by the Japanese-American scientist Hitoshi Murayama is aimed at the general public. Murayama discusses the fascinating exploration of a future particle physics era with the help of a new collider. It is followed by a round-table discussion about the need for a new collider, the discoveries that could be made and the different options that are on the table. Panelists include the renowned physicists J. Butterworth (U. College London), F. Canelli (U. of Zurich), F. Gianotti (CERN), B. Heinemann (DESY), K. Jakobs (U. of Freiburg), H. Murayama (UC Berkeley and IPMU) and J. Thaler (MIT).

October 6, 19:30 h

DESY main auditorium

<https://desy.de/youtube>



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