



SCIENCE COLLOQUIA

HTC SUPERCONDUCTORS FOR FCC (CERN FUTURE CIRCULAR COLLIDER)

CERN has recently started a Design Study for a possible next-generation high-energy hadron-hadron collider (Future Circular Collider – FCC-hh). The FCC-hh calls for an unprecedented center-of-mass collision energy of 100 TeV, colliding proton beams of 50 TeV steered in a 100-km circumference tunnel by 16 T superconducting magnets. The number of new technologies and new approaches needed to build this machine is incredibly high, and many groups of scientists are already at work to try to solve the more complex problems.

In this lecture the general characteristics of the new CERN FCC accelerator will be introduced. In the second part of the talk the efforts towards the realization of a superconducting beam screen allowing high beam stability will be described and discussed.

Prof. Ruggero Vaglio

Department of Physics "Ettore Pancini" –
University of Napoli Federico II, CNR-SPIN & INFN-Na



14 MARZO | ORE 14:45 | SALA TELECONFERENZE DFA

Evento organizzato da DFA-UniCT e supportato
da DFA-UniCT & CNR-IMM-Catania Uni

