



GIORNATA ACCELERATORI 7-8.04.2022

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CSN1 e acceleratori

CSN1 deals with particle physics experiments at accelerators, therefore even if its task is not strictly related to the construction of new accelerators, the availability of the right machines is a pre-requisite for carrying out CSN1 projects. In this sense CSN1 promotes, in a broad sense, physics and detector studies to motivate the R&D and the construction of the most appropriate machines to reach the energy and intensity frontiers.

In my concise presentation I will discuss the future projects, in which CSN1 is investing resources. By far the largest one is the construction of the two general-purpose detectors for the HL-LHC, a project which is well established right now. Planning for the medium-term future, the main projects are related to the Future Circular Collider (FCC) both as electroweak and Higgs factory (FCC-ee) and as a energy-frontier hadron machine (FCC-hh). Another project of interest for CSN1 is related to studies in preparation of a Muon Collider, as a lepton machine at very high centre-of-mass energy.