Giornata Acceleratori



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CSN1 e acceleratori

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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.

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