

The Strategies for higher Sustainable future in HEP

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The thirst for knowledge that drives people is to unearth the nature. The fundamental laws are hidden in nature at the small scales and to explore this innermost structure of nature, study has been done with particle physics. A facility with latest technologies and prospects adding the ideas for promising new avenues of investigation in the field of particle physics experiment does exist as the Large Hadron Collider (LHC) at CERN, Switzerland. The awareness and caring should be taken to make this study in the field of high energy physics (HEP) much sustainable in future. The strategies for such sustainability can be taken forward with some green initiatives. In an accelerator based working environment, the initiatives should be taken for 'production of electricity by fossil fuels' and 'reuse of hot water from a cooling plant for heating nearby residential areas'. The additional strategies can be taken which reduce carbon footprint factor and global-warming as well. The policy 'to make a robust digital platform to run the experiment remotely' can reduce the travel budgets considerably. In order to develop a potential digital platform and analyze experimental data, the ongoing software efforts need to be enhanced for better sustainability in the long run and cope up with new challenges. The HEP software would be available inside and outside HEP regime. Therefore, a versatile skill will be generated in future generation HEP software developers. Any future project for a major particle physics experiment must provide a detailed plan for 'saving and reuse of energy'.

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