Progress In High Field Accelerator Magnet Development by the US LHC Accelerator Research Program

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Abstract - The maximum magnetic field available to guide and focus the proton beams will be the most important factor driving the design of the High Energy LHC. The US LHC Accelerator Research Program (LARP) is a collaboration of US National Laboratories aiming at demonstrating the feasibility of Nb3Sn magnet technology for application to future colliders. While LARP is primarily focused on the requirements of the High-Luminosity LHC (HL-LHC), it is also directly relevant to the High-Energy LHC (HE-LHC). Program results and future directions will be discussed.

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