

APR17-2016-030063

Abstract for an Invited Paper  
for the APR17 Meeting of  
the American Physical Society

**High power proton beams: limits and future**

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High power proton accelerators are important tools for high-energy physics, nuclear physics and materials science, but also are capable of powering important applications such as isotope production, materials irradiation and advanced nuclear energy systems. The next generation of high-power proton accelerators will need to provide higher beam power and higher reliability while remaining affordable. The technological limitations of high power proton accelerators will be reviewed as will the promising future directions in the field.