

Abstract Submitted  
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**Numerical Studies of Hydrodynamic Instabilities Using Intense Ion Beams** N.A. TAHIR, GSI Darmstadt, Darmstadt, Germany, A. SHUTOV, IPCP Chernogolovka, Russia, A.R. PIRIZ, UCLM, Ciudad Real, Spain, C. DEUTSCH, LPGP, University of Paris Sud, Orsay, France, TH. STOEHLKER, GSI Darmstadt, Darmstadt, Germany — Intense particle beams can generate extremely high pressures in solid materials. Numerical simulations are presented to propose an experiments to study Richtmyer-Meshkov instability in the linear and non-linear regimes in solids as well as ideal fluids using intense uranium beams that will be generated at the FAIR facility at Darmstadt. These experiments form the basics of the experimental program, the HEDgeHOB collaboration, to study High Energy Density Physics problems at the FAIR facility in future.

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