**HED science with intense heavy-ion pulses at GSI/FAIR**

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The facility FAIR, currently under construction at the GSI Helmholtzzentrum für Schwerionenforschung, will deliver short heavy-ion pulses at unprecedented fluences. Within the framework of the HED@FAIR collaboration we are preparing an experimental station where such pulses can be used for volumetric heating of mm-scale samples to electron-volt temperatures, providing a novel path to generating matter at extreme conditions. Comissioning of the infrastructure and early proof-of-principle experiments are currently being carried out at an existing irradiation area at GSI. We will present first results testing ion beam focusing and heating with >4e9 Pb-ion pulses, as well as diagnostic schemes based on intense x-ray sources driven by GSI's high-energy laser facility PHELIX.