

# LASER AND PARTICLE BEAM INTERACTION WITH IONIZED MATTER AND PERSPECTIVES FOR FUSION ENERGY

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Intense ion- and laser beams are complimentary tools to induce High Energy Density in matter. The development of this field is intimately connected to technological advances of the field. We will give an overview of the projects in High Energy Density science that we currently address at Xi'An Jiaotong University with aspects of inertial fusion energy and due to recent developments we will address the proton-11Boron fusion reaction.