Commissioning and First Results from the new 2X100 TW laser at the WIS

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At the Weizmann Institute of Science, a new high-power-laser laboratory has been established that is dedicated to the fundamental aspects of laser–matter interaction in the relativistic regime and aimed at developing compact laser-plasma accelerators for delivering high-brightness beams of electrons, ions, and x rays. The HIGGINS laser system delivers two independent 100 TW beams and an additional probe beam. I will describe the laser system and will present the very first results for particle and radiation beam delivery.

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