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Magnetized jet creation using a ring laser and applications EDI-SON LIANG, rice university, IAN GAO, princeton university, YINGCHAO LU, rice university, HANTAO JI, princeton university, RUSS FOLLETT, DUSTIN FROULA, LLE rochester, PETROS TZEFERACOS, DONALD LAMB, university of chicago, ANDREW BICKEL, HONG SIO, CHI KIANG LI, RICHARD PETRASSO, MIT, MINGSHENG WEI, general atomic, WEN FU, LILY HAN, rice university — We have recently demonstrated a new robust platform of magnetized jet creation using 20 OMEGA beams to form a hollow ring. We will present the latest experimental results and their theoretical interpretation, and explore potential applications to laboratory astrophysics, fundamental plasma physics and other areas. We will also discuss the scaling of this platform to future NIF experiments.

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