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Integrating 3D Printing into Target Fabrication at the University of Michigan[1] SALLEE KLEIN, ROBB GILLESPIE, MICHAEL DEININGER, CARLOS DI STEFANO, MARIO MANUEL, WESLEY WAN, CAROLYN KURANZ, PAUL KEITER, R. PAUL DRAKE, University of Michigan — The integration of 3D printing into target fabrication in the past several years has been a challenge. As target designs for high-energy-density experiments have become more complex, utilizing 3D printing is the natural progression, opening up the possibilities of very sophisticated, repeatable, yet inexpensive targets that require far less lead time than traditional means. At the University of Michigan we utilize the technique of machined acrylic bodies and mating components, to minimize target-to-target variability and assemble more reproducible targets. By combining 3D printing with traditional machining, we are able to take advantage of the very best part of both aspects of manufacturing. We present several recent campaigns to showcase and introduce our techniques and our integration of 3D printing, which has maintained our success of complex target designs with simple and inexpensive construction.

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