## Abstract Submitted for the DPP12 Meeting of The American Physical Society

Resolving Multiple Plasma Filaments using Single-shot Tomographic Imaging<sup>1</sup> NICHOLAS MATLIS, ANDREW AXLEY, WIM LEEMANS, Lawrence Berkeley National Lab — Laser-induced plasmas can often exhibit structures that are heterogeneous or are composed of multiple filaments, making them difficult to measure. Current single-shot methods for measuring plasma structure require strong symmetry assumptions about the form of the plasma, leading to large errors in structure determination. Here we demonstrate a new technique capable of resolving such structure in a single shot without assumptions by using Spectrally-Multiplexed Tomography.

<sup>1</sup>Work supported by the Office of Science, Office of High Energy Physics, of the U.S. Department of Energy under Contract No. DE-AC02-05CH11231.

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Date submitted: 23 Jul 2012 Electronic form version 1.4