

Abstract Submitted  
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**Simultaneous Green and Infrared PDV** MATTHEW BRIGGS, ANDREA ALBERT, PATRICK YOUNK, Los Alamos National Laboratory — We have developed a fiber PDV system that operates at 532nm, i.e., Green PDV. The fringe constant, or # fringes/change in position, is three times higher than in traditional PDV, which is implemented with 1550 nm lasers. Because of that, we expect approximately three times better velocity resolution in the new system. By using a bare fiber probe, we are able to test it side-by-side with the traditional 1550 nm infrared PDV. We will present our design and results. Our results show that indeed we find about three times the velocity resolution with this new system compared to the 1550 nm PDV. The shorter wavelength also allows tighter focusing, which we took advantage of to probe some of the details of Asay foil measurements. We report on these results as well. LA-UR-19-21661

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