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Advanced PDV velocity extraction¹ DANIEL DOLAN, Sandia National Laboratories, TOMMY AO, Sandia National Laboratory, MICHAEL FURNISH, Sandia National Laboratories — While PDV has become a standard diagnostic, reliable velocity extraction remains challenging. Measurements with multiple real/apparent velocities are intrinsically difficult to analyze, and overlapping frequency components invalidate standard extraction methods. This presentation describes an advanced analysis technique where overlapping frequency components are resolved in the complex Fourier spectrum. Practical matters—multiple region of interest selection, component intersection, and shock transitions—will also be discussed.

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