Abstract Submitted
for the NWS07 Meeting of
The American Physical Society

Development of a low cost 3D Particle Image Velocimetry for sub-sonic wind tunnel applications in Idaho State University. CARLOS O. MAIDANA, Idaho State University - Dept. of Physics and College of Engineering, MARCO P. SCHOEN, KALYAN JINNURI, BRIAN G. WILLIAMS, Idaho State University - College of Engineering, LAWRENCE BEATY, Idaho State University - College of Technology — PIV is a non-intrusive technique that provides instantaneous velocity vector measurements in a cross section of a flow. The stereo or 3D PIV technique is a topic of current interest due to its capability of 3D mapping of the vector field. We present in this paper an approach to build a low cost 3D PIV system for sub sonic wind tunnel applications as well as the related basic CFD studies.

Carlos Maidana
Idaho State University - Dept. of Physics and College of Engineering

Date submitted: 17 Apr 2007 Electronic form version 1.4