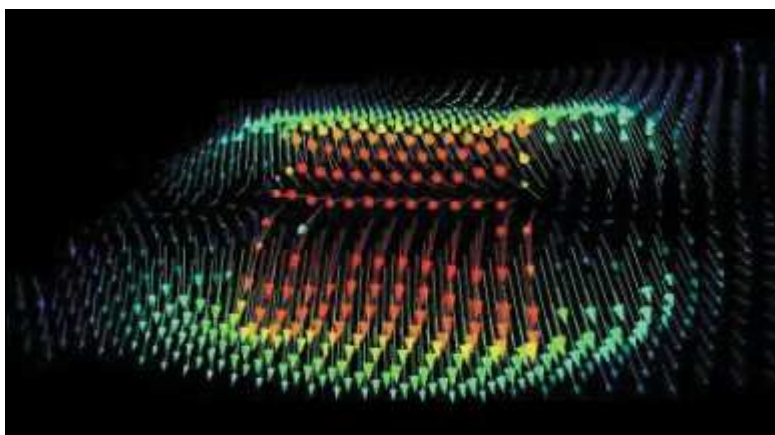


FlowMaster 2D and 3D-Stereo PIV

FlowMaster PIV systems can be used for 2D and 3D flow field analysis. **FlowMaster stereoscopic 3D** is a straight forward extension of the **FlowMaster 2D** concept and enables the measurement of all three velocity components inside a light sheet. 3D stereoscopic PIV is based on the principle of stereoscopic imaging that is well known from the human eyesight. Two cameras are imaging the illuminated flow particles from different angles. Scheimpflug lens arrangements keep the planes in focus. The combination of both camera projections allows the reconstruction of the "real" particle displacement inside the measurement area and the evaluation of all three velocity components.



LaVision has developed new algorithms for an easier and quick calibration technique. The achieved **self calibration** method is a unique tool to correct even large misalignments between calibration plate and laser light sheet. LaVision's self calibration method is a standard feature of the 3D Stereo-PIV software in DaVis 7.



3D-PIV vector presentation