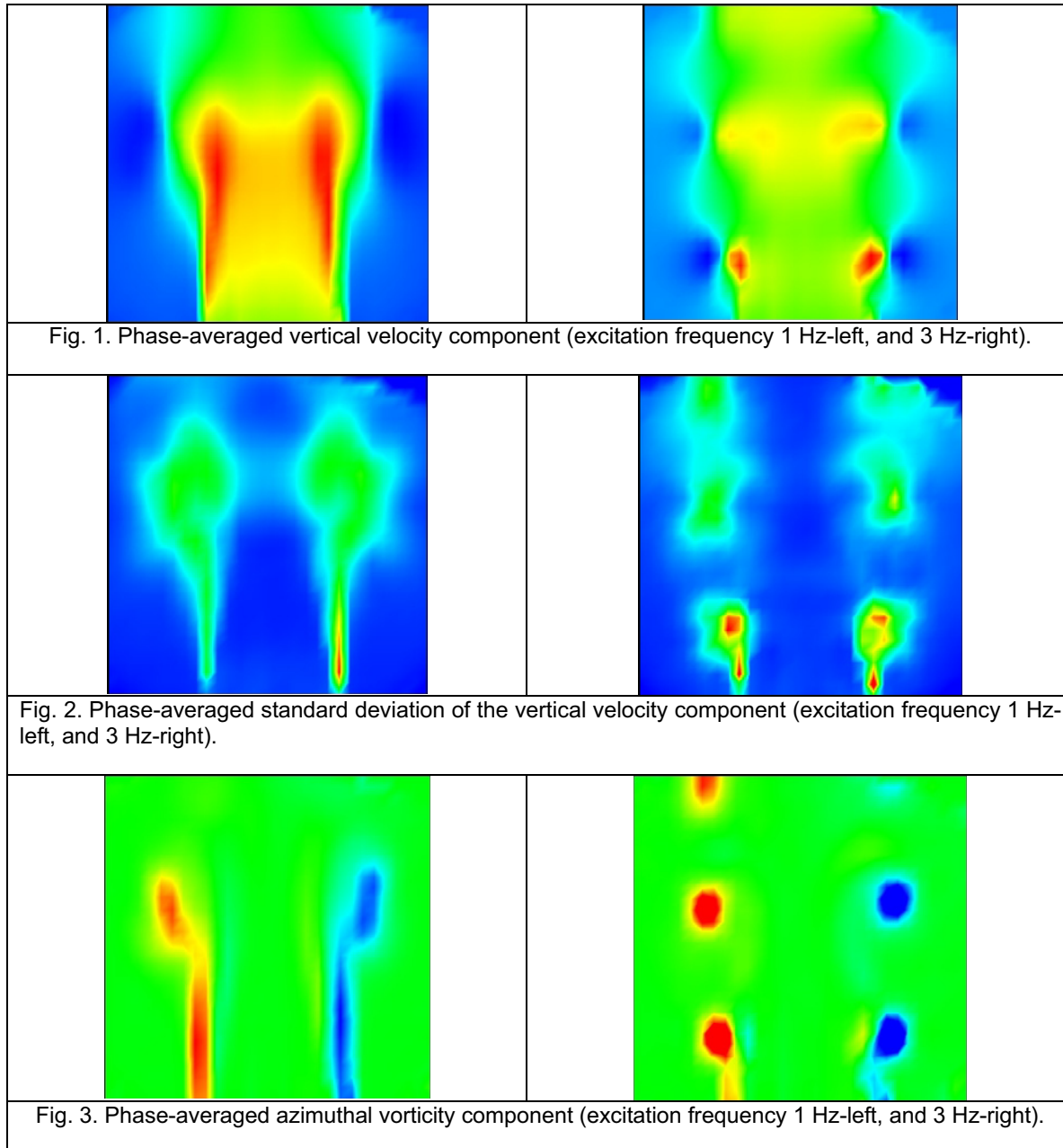


Excited Single-Phase (Liquid) Jets

*Milenkovic, R.*¹⁾, *Sigg, B.*²⁾ and *Yadigaroglu, G.*²⁾

1) *Laboratorium für Thermohydraulik LTH-PSI, Paul Scherrer Institut, OVGA 415, CH-5232 Villigen PSI, Switzerland.*

2) *Laboratorium für Kerntechnik, ETH Zentrum CLT-D3, CH-8092 Zürich, Switzerland.*



The scalar maps show some phase-averaged quantities obtained by PIV in the developing region of a periodically triggered, axisymmetric liquid single-phase jet. Excitation frequencies are 1 Hz and 3 Hz, corresponding to Strouhal number $St = 0.3$ and 0.6 , respectively. Triggering of the jet shear layer leads to concentration of the shear layer vorticity in the coherent vortex rings which travel downstream at about half of the jet velocity.