Numerical study of shear layer instability in transverse jets[1] KR-
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ical simulations are performed to study the transition from absolute to convective
instability for incompressible jets in crossflow using an unstructured finite volume
solver. Flow conditions are based on experimental conditions of Megerian *et al.*
(2007) for a flush injected jet. Results obtained from simulated jet velocity ratios of
2 and 4 are compared with experimental data (Getsinger *et al.* 2011 and Megerian
et al. 2007) and show good agreement in instantaneous and time averaged flow
characteristics as well as velocity spectra. Proper orthogonal decomposition (POD)
and Koopman mode decomposition of the three-dimensional flow field is performed
to identify the dominant flow features and their corresponding frequencies.

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