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M.S. Candidate

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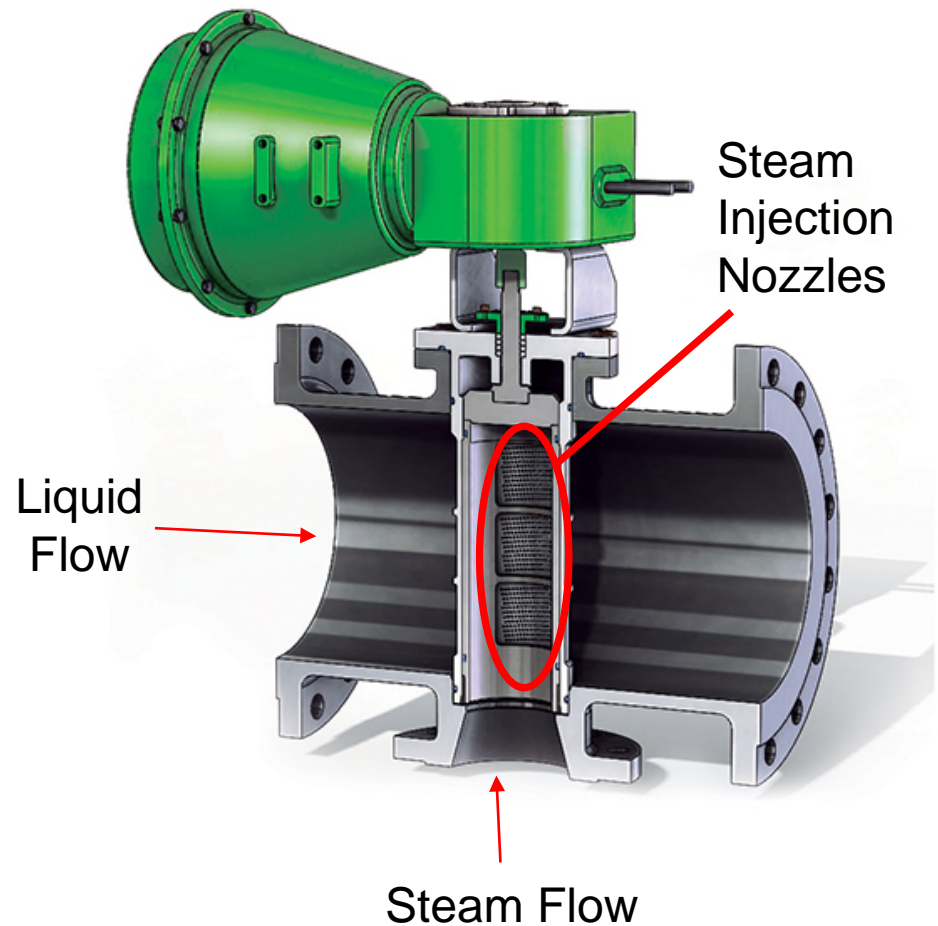
Arganthael Berson

Kristofer Dressler

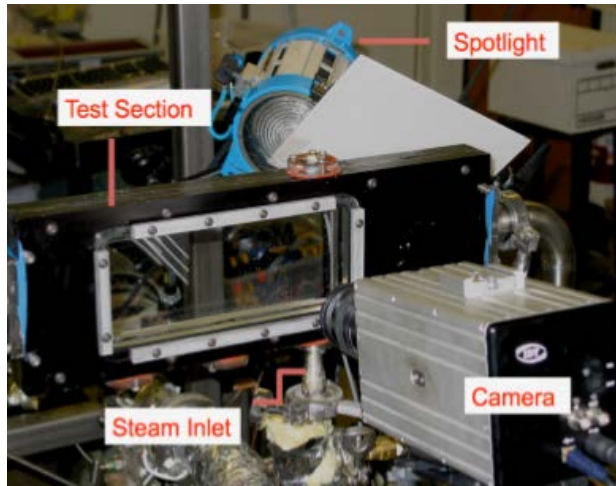
Thesis: Conditional Stability of
Saturated Steam Condensation in
Liquid Crossflow

Motivation

- Many industries use direct steam injection to heat process fluids
- The condensation process can become unstable resulting in damaging vibration and noise
- There is not currently an adequate method to predict stability based on process parameters



Solaris: Hydro-Thermal Corp.



Barot, 2011

Steam Injection Visualization

Stable



Unstable



Bouman, 2014