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Numerical Prediction of Potential Cavitation Erosion in Fuel Injectors

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 PII:
 S0301-9322(17)30498-6

 DOI:
 10.1016/j.ijmultiphaseflow.2018.03.005

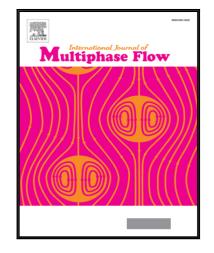
 Reference:
 IJMF 2760



Received date:16 July 2017Revised date:7 February 2018Accepted date:3 March 2018

Please cite this article as: Sandeep Mouvanal, Dhiman Chatterjee, Shamit Bakshi, Axel Burkhardt, Volker Mohr, Numerical Prediction of Potential Cavitation Erosion in Fuel Injectors, *International Journal of Multiphase Flow* (2018), doi: 10.1016/j.ijmultiphaseflow.2018.03.005

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Highlights

- Cavitation occurs in flow devices when pressure drops below saturation pressure.
- Collapse of cavitation bubble may lead to erosion of the components.
- CFD based numerical technique is used to predict potential erosion due to cavitation.
- Numerical algorithm efficiently captures collapse pressure.
- Simulation using present approach is fast and requires less computational resource.
- Proposed method is expected to reduce design cycle time of fuel injectors.

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