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Development of a compressible multiphase cavitation approach for diesel spray modelling

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## Highlights

- A multiphase Volume of Fluid Large Eddy Simulation is implemented in OpenFOAM.
- Volume fraction transport equations are reformulated.
- Cavitation models by Schnerr and Kunz are extended to eliminate non-physical mass transfer rates.
- Wall shear and in-nozzle cavitation contribute significantly to the fragmentation of the jet.

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