

## **Riemann problems for an isothermal model of disperse vapor bubbles in a compressible liquid**

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The talk covers recent analytical and computational results on Riemann problems for systems of conservation laws that model certain mixtures of two fluid phases. A typical case are vapor bubbles in water. The water is treated as a slightly compressible liquid. The isothermality assumption reduces the complexity of the system. It has turned out to be useful in conjunction with the consideration of phase transitions. The full equations including phase transitions have been derived in previous work.

This is joint work with Maren Hantke and Vincent Ssemaganda.