

Abstract Submitted
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The Augmented Fast Marching Method for Level Set Reinitialization¹ DAVID SALAC, University at Buffalo - SUNY — The modeling of multiphase fluid flows typically requires accurate descriptions of the interface and curvature of the interface. Here a new reinitialization technique based on the fast marching method for gradient-augmented level sets is presented. The method is explained and results in both 2D and 3D are presented. Overall the method is more accurate than reinitialization methods based on similar stencils and the resulting curvature fields are much smoother. The method will also be demonstrated in a sample application investigating the dynamic behavior of vesicles in general fluid flows.

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