

The Patterned Interface Reconstruction Algorithm
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The Patterned Interface Reconstruction Algorithm reduces the material interface discontinuity between neighboring computational elements. The interface continuity is produced by a second-order accurate interface representation for smooth volume fraction distributions. The method will reproduce planar interfaces in simple and intersecting orientations in two- and three-dimensions on orthogonal, structured meshes and non-orthogonal, unstructured meshes. Calculated interfaces of curved, smoothly varying bodies are also second-order accurate.