

Abstract Submitted
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Pattern formation in ternary lipid membranes with composition-deformation coupling MATTHEW DEMERS, Northwestern University Department of Applied Mathematics, FRANCISCO SOLIS, MONICA OLVERA DE LA CRUZ, Northwestern University Department of Materials Science — We study patterns formed in three-component lipid membranes, where composition is coupled to shape via differences in spontaneous curvature. The system is examined in the strong segregation regime. System morphology is determined by the competition of bending energy, surface tension, and line tension. We will present the phase behavior as determined by numerical minimization, as well as analytic solutions for select cases.

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