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Abstracts of Short Communications and Posters

Section:

5. Differential Geometry and Global Analysis

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Sullivan, John M, University of Illinois, Urbana, USA
Triunduloids: Embedded Constant-Mean-Curvature Surfaces with Three Ends
We consider the moduli space of all almost embedded constant-mean-curvature surfaces with three ends and genus zero. These are called triunduloids because each end is asymptotically an unduloid (a Delaunay surface). Considering force balancing conditions and the conjugate-cousin minimal surface in S^3 allows us to explicitly describe the moduli space of triunduloids, which is isomorphic to to space of triangles in S^2. Going around loops in this space creates new bubbles on the ends of the surface.