

BICONSERVATIVE SURFACES IN SPACE FORMS

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In this lecture we consider a new family of surfaces which are described as those with free stress-energy tensor associated to the bienergy. This family is characterized by the request that twice the mean curvature function f and the shape operator A satisfy: $A(\text{grad } f) = -f/2 \text{ grad } f$.

We will show that this class of surfaces, which includes CMC surfaces, carries some interesting geometry.