

On the uniqueness of complete biconservative surfaces in 3-dimensional space forms

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Abstract. Biconservative surfaces are surfaces with divergence-free stress-bienergy tensor. Simply connected, complete, non-*CMC* biconservative surfaces in 3-dimensional space forms were constructed using either the extrinsic or the intrinsic point of view, and the question of their uniqueness was raised. In this paper we give a positive answer to this question.

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