

Gluing constructions and special Lagrangian cones

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Abstract

Gluing is a technique in nonlinear PDE whereby a new solution of A PDE THAT corresponds to the ‘sum’ of two known solutions is created by approximation and perturbation methods. This technique has been applied in several contexts in Riemannian geometry, for example in constructing connect sums of manifolds satisfying a variety of curvature conditions. I will review general aspects of the gluing technique and consider applications in special Lagrangian geometry.