cases	doc_1	doc_2	decision	id
			NOT DUPLICATES	1973

doc_1

authors	• Joyce, Dominic
title	Special Lagrangian submanifolds with isolated conical singularities. V. Survey and applications
publication_date	2003-01-01 00:00:00
source	SupportedSources.CORE
journal	Journal of Differential Geometry
volume	
doi	None
urls	• https://core.ac.uk/download/pdf/96552.pdf
id	id-6721536835861504877
abstract	Special Lagrangian m-folds (SL m-folds) are a distinguished class of real m-dimensional minimal submanifolds which may be defined in C m, or in Calabi
versions	

doc_2

authors	• Joyce, Dominic
title	Special Lagrangian submanifolds with isolated conical singularities. III. Desingularization, the unobstructed case
publication_date	2003-01-01 00:00:00
source	SupportedSources.CORE
journal	None
volume	
doi	10.1023/b:agag.0000023231.31950.cc
urls	• https://core.ac.uk/download/pdf/1568128.pdf
id	id-3108400831647258967
abstract	This is the third in a series of five papers math.DG/0211294, math.DG/0211295, math.DG/0302356, math.DG/0303272 studying compact special Lagrangian submanifolds (SL m-folds) X in (almost) Calabi-Yau m-folds M with singularities x_1,...,x_n locally modelled on special Lagrangian cones C_1,...,C_n in C^m with isolated singularities at 0. Readers are advised to begin with the final paper math.DG/0303272 which surveys the series, gives examples, and applies the results to prove some conjectures. The first two papers math.DG/0211294, math.DG/0211295 studied the regularity of X near its singular points, and the moduli space of deformations of X. In this paper and the fourth math.DG/0302356 we construct desingularizations of X, realizing X as a limit of a family of compact, nonsingular SL m-folds \tilde N^t in M for small t>0. Suppose L_1,...,L_n are Asymptotically Conical SL m-folds in C^m, with L_i asymptotic to the cone C_i at infinity. We shrink L_i by a small t>0, and glue tL_i into X at x_i for i=1,...,n to get a 1-parameter family of compact, nonsingular Lagrangian m-folds N^t for small t>0. Then we show using analysis that when t is sufficiently small we can deform N^t to a compact, nonsingular SL m-fold \tilde N^t via a small Hamiltonian deformation. This \tilde N^t depends smoothly on t, and as t --> 0 it converges to the singular SL m-fold X, in the sense of currents. This paper studies the simpler cases, where by topological conditions on X and L_i we avoid various obstructions to existence of \tilde N^t. The sequel math.DG/0302356 will consider more complex cases when these obstructions are nontrivial, and also desingularization in families of almost Calabi-Yau m-folds.Comment: 54 pages. (v2) new reference, changed notatio
versions	