

cases	doc_1		doc_2		decision	id
			authors	<ul style="list-style-type: none">Joyce, Dominic	NOT DUPLICATES	1972
	title	Special Lagrangian submanifolds with isolated conical singularities. V. Survey and applications	title	Special Lagrangian submanifolds with isolated conical singularities. IV. Desingularization, obstructions and families		
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	doi	None	doi	10.1023/b:agag.0000031067.19776.15		
	urls	<ul style="list-style-type: none">https://core.ac.uk/download/pdf/96552.pdf	urls	<ul style="list-style-type: none">https://core.ac.uk/download/pdf/1568136.pdf		
	id	id-6721536835861504877	id	id7620766254622471308		
	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	abstract	This is the fourth in a series of five papers math.DG/0211294, math.DG/0211295, math.DG/0302355, 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 paper math.DG/0211294 studied the regularity of X near its singular points, and the second math.DG/0211295 the moduli space of deformations of X. The third paper math.DG/0302355 and this one 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. Let L_1,...,L_n be Asymptotically Conical SL m-folds in C^m, with L_i asymptotic to C_i at infinity. We shrink L_i by 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 for small t we can deform N^t to a compact, nonsingular SL m-fold \tilde{N}^t via a small Hamiltonian deformation. As t--> 0 this \tilde{N}^t converges to X, in the sense of currents. The third paper math.DG/0302355 studied simpler cases, where by topological conditions on X and L_i we avoid obstructions to existence of \tilde{N}^t. This paper considers more complex cases when these obstructions are nontrivial, and also desingularization in smooth families of almost Calabi-Yau m-folds M^s for s in F, rather than a single almost Calabi-Yau m-fold M.Comment: 54 pages. (v2) New reference, changed notatio		
	versions		versions			