Singularities of Special Lagrangians.

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Special Lagrangians are a class of minimal surfaces (of higher dimension and codimension) introduced by Harvey and Lawson (in a paper published in 1980's). Special Lagrangians may be singular in the sense of Geometric Measure Theory which has been studied systematically at least since 1960's but the singularities of minimal surfaces of higher dimension and co-dimension are not yet so well-understood as in the case of lower dimension or co-dimension. Also in Yang-Mills gauge theory the higher-dimensional case is much more difficult than the lower-dimensional case. Since 1990's however there have been a remarkable interaction between Geometry and String Theory involving a notion called Fukaya categories which is rather technical but is applicable to the study of singular special Lagrangians though the relation to Geometric Measure Theory is not clear yet. I have obtained some results about these topics and will explain them in the talk.