On the Fukaya category of cotangent bundles

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Tea 3:45-4 in MCS 153

Abstract: I will explain a geometric criterion for a collection of Lagrangians generating the Fukaya category of a symplectic manifold. Applying this criterion to the cotangent bundle, we will conclude that a single cotangent fibre generates the Fukaya category. From this, we obtain strong constrains on the topology of exact Lagrangian submanifolds, and prove that they must all be homotopy equivalent to the base.