Hilbert, Norman

Lagrange cylinders and minimal annuli. (Lagrange Zylinder und minimale Annuli.) (German)

Zbl 1285.53068

Bonner Mathematische Schriften 398. Bonn: Univ. Bonn, Mathematisches Institut; Bonn: Univ. Bonn, Mathematisch-Naturwissenschaftliche Fakultät (Diss.). 72 p. (2010).

The author studies the question when two Lagrangian submanifolds in a symplectic manifold are isotopic. To make the problem more accessible, he assumes that the symplectic manifold is a cotangent bundle and that the Lagrangian submanifolds are Lagrange cylinders. To construct the isotopy he uses minimal surfaces, as they are easier to work with than pseudoholomorphic curves.

Reviewer: Karl Heinz Dovermann (Honolulu)

MSC:

53D12 Lagrangian submanifolds; Maslov index
57R52 Isotopy in differential topology

Keywords:

Lagrange submanifolds; isotopy

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