

[Černe, Miran](#)**Minimal discs with free boundaries in a Lagrangian submanifold of  $\mathbb{C}^n$ .** (English)[Zbl 1010.58500](#)[Indiana Univ. Math. J. 44, No. 1, 153-164 \(1995\).](#)

Summary: The question when an energy functional stationary disc  $p$  with free boundary in a Lagrangian submanifold of  $\mathbb{C}^n$  is holomorphic or antiholomorphic is considered. A partial answer is given in terms of its partial indices [see *J. Globevnik*, *Math. Z.* 217, No. 2, 287-316 (1994; [Zbl 0806.58044](#))]. It is proved that if all its partial indices are greater or equal to  $-1$ , then the stationary disc  $p$  is holomorphic, and if all its partial indices are less or equal to  $1$ , the disc  $p$  is antiholomorphic (a consequence of *Y.-G. Oh* [*Kyungpook Math. J.* 35, No. 1, 39-75 (1995; [Zbl 0853.32017](#))]).

**MSC:**

[58E12](#) Variational problems concerning minimal surfaces (problems in two independent variables)

[Cited in 1 Document](#)

[32F99](#) Geometric convexity in several complex variables

**Full Text:** [DOI](#)