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Yanxia Deng* (dengyx@math.northwestern.edu), 2033 sheridan road, Mathematics Department, Evanston, IL 60208. *Instability of Periodic Extremals by Conley-Zehnder Index Theory*. Preliminary report.

We study the connections between the stability properties, the Morse index and the Conley-Zehnder index of a periodic extremal in Lagrangian systems. One consequence of our result is that an isolated minimizing closed geodesic in an even dimensional space is always unstable. (Received January 19, 2015)