

*The spectrum of reversible minimizers*

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Poincaré and, later on, Carathéodory, showed that the Floquet multipliers of 1-dimensional periodic curves minimizing the lagrangian action are real and positive. Even though Carathéodory himself observed that this result loses its validity in the general higher-dimensional case, we shall show that it remains true for systems which are reversible in time. In this way, we also generalize a previous result by Offin on the hyperbolicity of nondegenerate symmetric minimizers. Our arguments rely on the higher-dimensional generalizations of the Sturm theory which were developed during the second half of the twentieth century by several authors, including Hartman, Morse or Arnol'd.

The results we will be talking about have recently been published in Regular and Chaotic Dynamics, vol. 23 (2018).