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A pressure-driven model for the quasi periodical oscillations of the Single Helical States in Reversed Field Pinch plasmas ROBERTO PACCAGNELLA, Consorzio RFX and CNR — In this work a model that could explain the experimentally observed quasi periodical oscillations in electron temperature and perturbed magnetic field in a Reversed Field Pinch is discussed. An ohmically heated plasma in which an interplay between thermal conduction and heat transport, on one side, and the magneto-hydro-dynamical stability, on the other side, is studied. It is shown that, by making some simple and physically reasonable assumptions, a set of equations can be obtained showing a variety of periodical or quasi periodical oscillations for the relevant dynamical variables.

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