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On MHD stability of gravitating plasmas with field aligned flows GEORGE THROUMOULOPOULOS, University of Ioannina, HENRI TASSO, Max-Planck-Institut fuer Plasmaphysik — A previous stability condition (see Throumoulopoulos and Tasso, Physics of Plasmas 14, 122104 (2007)) for incompressible plasmas with field aligned flows is extended to gravitating plasmas including self-gravitation. It turns out that the stability condition is affected by gravitation through the equilibrium values only. A possible application of the condition in the framework of an idealized model could be the stability of the earth magma.

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