091 **THE GRAVITATION TWO-STREAM INSTABILITY IN A 2-D PHASE SPACE.** *Karine F. Magnago, Paulo R. de A. Zingano. (*Departamento de Matemática Pura e Aplicada,Instituto de Matemática,UFRGS).

In this work, the gravitational 2-stream instability in phase space is investigated numerically using an upwind Godunov-like finite difference scheme. The multi-dimensional computation is done using a dimension Strang splitting to achieve higher accuracy.(CNPq).