



## **Superresonant instability of a compressible hydrodynamic vortex**

**Leandro A. Oliveira, Luís C. B. Crispino**

Universidade Federal do Pará, Brazil

**Vitor Cardoso**

**Universidade de Lisboa, Portugal**

We show that a purely circulating and compressible system, in an adiabatic regime of acoustic propagation, presents superresonant instabilities. To show the existence these instabilities, we compute the quasinormal mode frequencies of this system numerically using a frequency domain method.