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Inertial waves and wave attractors in a rotating annulus with inner or outer cylinder libration

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Inertial waves exist in rotating flows and are an ubiquitous phenomena in geophysical and astrophysical flows. Excitation mechanisms of inertial waves and wave attractors are the subject of recent publications [1, 2, 3].
Our research is focussed on the experimental and numerical study of inertial waves occuring in a homogeneous liquid confined between two coaxial co-rotating cylinders. The inner one has an inclined wall (frustum), in order to focus wave-energy [2]. Both cylinders rotate with mean angular velocity Ω. Inertial waves are excited due to superimposed periodic oscillations with frequencies $0 \leq \omega \leq 2\Omega$ of (i) the inner or (ii) the outer cylinder together with the upper and lower lid of the cavity.
The first results exhibit an agreement of wave reflection and attractor geometries between theory [2], numerical simulations and measurements. Further, we present similarities and differences between the cases of inner and outer cylinder libration.

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