On the wanderings of a ludion in a corral: in search of a quantum analogy

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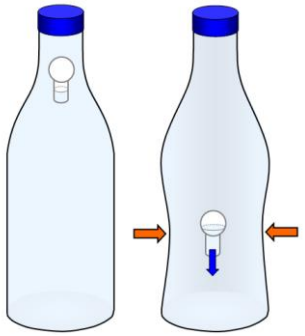
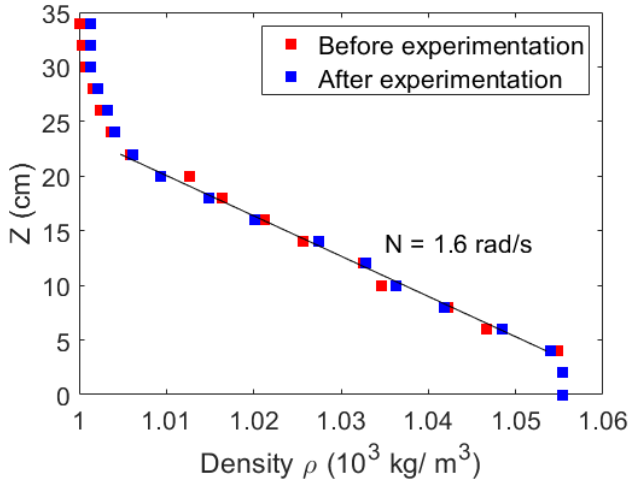
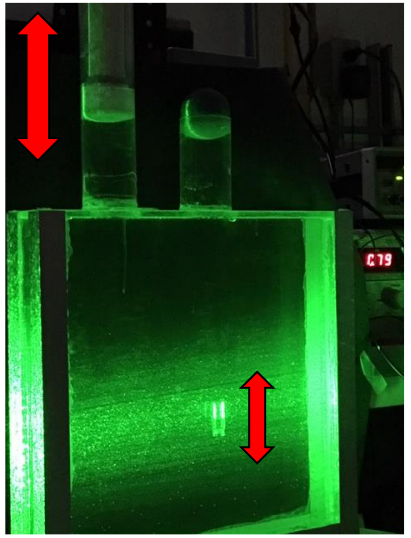
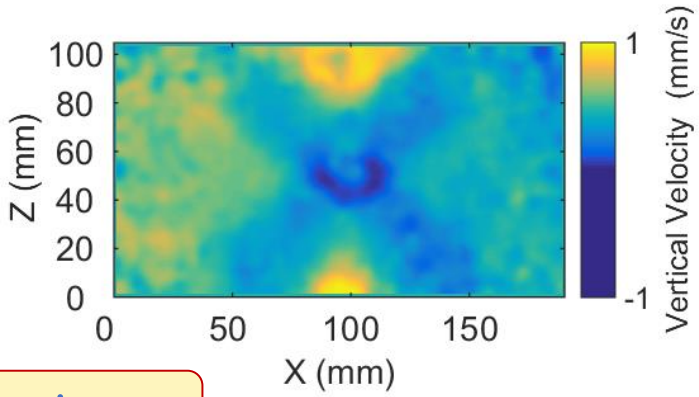


In the case of a homogeneous fluid, the ludion has an unstable equilibrium position, contrary to density stratified fluid



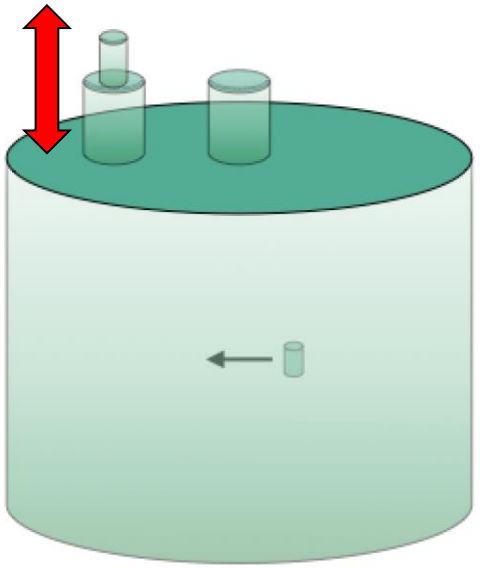


The ludion emits internal gravity waves when forced to oscillate at $\omega < N$

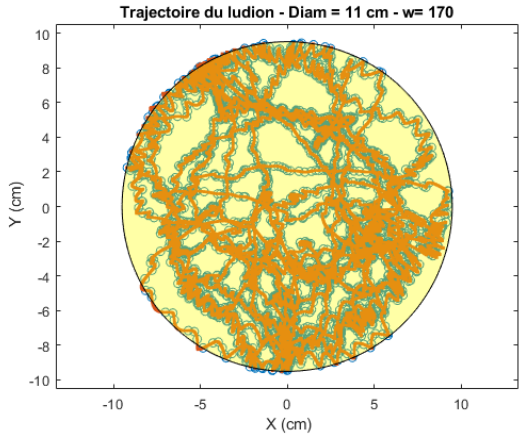


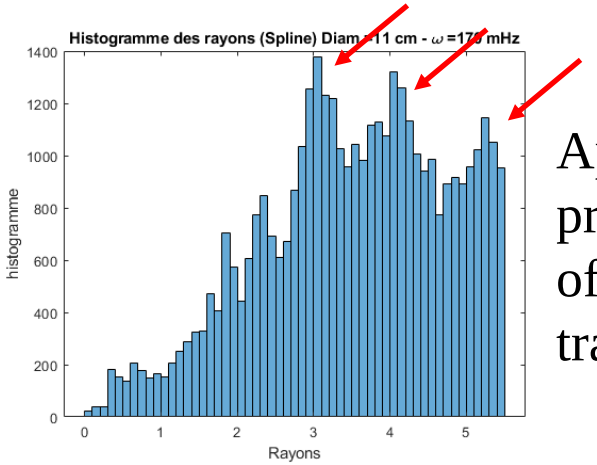
Moreover, the ludion bifurcates to horizontal swimming

A ludion in a circular Corral



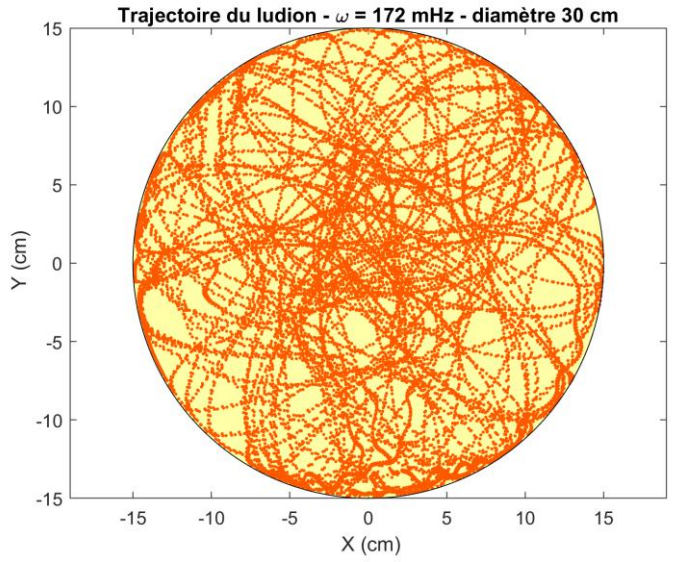
Trajectory Radius Histograms - Corral of Diameter= 11 cm

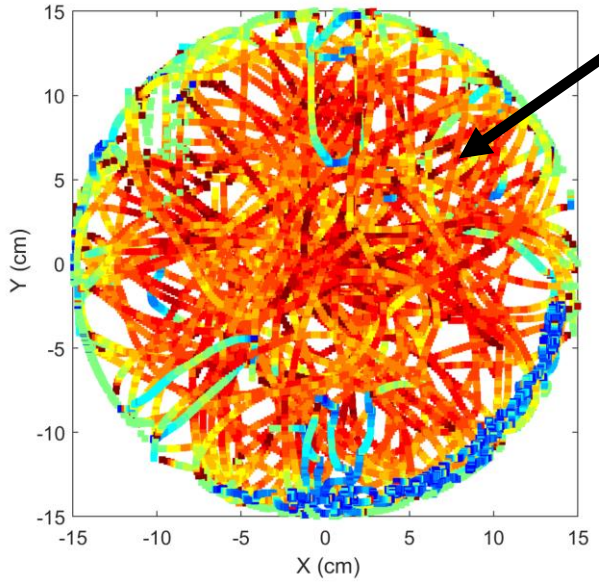




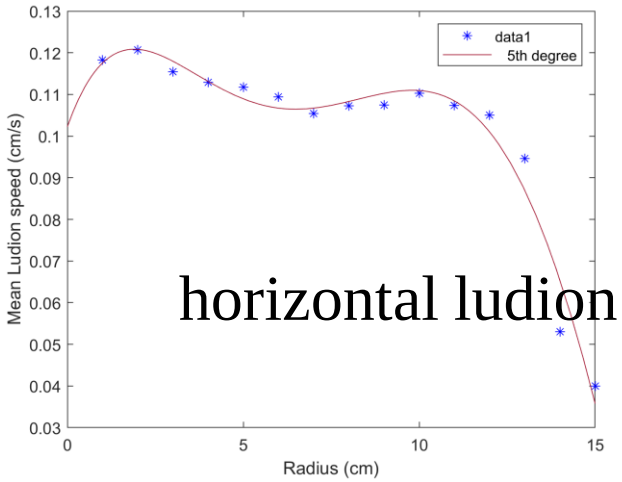
Appearance of prefered radius of horizontal trajectory

Trajectory Radius (14h recording) - Corral of Diameter= 30 cm





Appearance of a faint but visible target pattern on horizontal ludion speed color : ghost of a internal gravity eigenmode ?



horizontal ludion speed