



Contribution ID: 116

Type: **Oral presentations**

## An oscillating Cartesian diver to study pressure in fluids

*Thursday 29 August 2024 11:10 (20 minutes)*

We suggest a modification to the classical Cartesian diver experiment, wherein the diver operates within a fluid with density stratification rather than uniform density. Unlike the conventional setup, under a given external pressure, the diver achieves a stable equilibrium at a specific depth where its density matches that of the surrounding fluid. By adjusting the applied pressure, its density changes and it moves towards a new stable equilibrium at a different depth. When subjected to a sudden pressure pulse, the diver density changes and it starts oscillating driven by a restoring force with a frequency dependent on the density gradient.

### How would you like to present your contribution?

Live in Kraków (time slot to be allotted based on the programme)

### Target education level

Secondary

### Category

Formal Education

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**Session Classification:** Oral presentations

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