



Contribution ID: 220

Type: **Poster**

## Understanding reversible and irreversible processes through activities

*Thursday 29 August 2024 12:30 (10 minutes)*

Understanding reversible and irreversible processes in thermodynamics presents a significant challenge for undergraduate physics students in India. The idealized nature of reversible processes often proves difficult to replicate in laboratory settings. In our activity, inspired by the widely recognized demonstration of food colour drops in highly viscous liquids, we provide students with a visual representation accompanied by graphical evidence of reversible process. By manipulating the viscosity of the liquid, we also illustrate irreversible processes within this activity. The analysis of these processes was conducted using the open-source video analysis software “TRACKER,” enhancing the comprehensibility and accessibility of our findings.

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

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

### Target education level

University

### Category

Formal Education

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**Session Classification:** Poster session

**Track Classification:** Experiments and Practical Work in Physics Education