

# 26th International Conference on Multimedia in Physics Teaching and Learning (MPTL '26)

Contribution ID: 29

Type: **Oral presentation**

## Visualizing the Movement of the Celtic Stone

*Thursday 7 September 2023 15:00 (20 minutes)*

The Celtic Stone (also known as a rattleback) is a semi-ellipsoidal shaped solid object which when spun rotates on its axis in a preferred direction. If spun in the opposite direction, it goes to the stop and reverses its spin to the preferred direction [1]. As the movement of the stone is multidirectional it is a challenge to perform quantitative measurements of its motion characteristics.

The work presents the experimental set-up and the procedure for collecting data of a rattleback motion. Some preliminary results of video measurements performed with a specific metal rattleback and meant to visualize its motion. Attempts to compare the results with predictions based on the numerical model of the situation are undertaken [2].

The advantages and disadvantages of the measurement system will be presented and discussed.

### Contribution categories - primary focus

University

### Contribution categories - type

Application (shared experience, activity suggestions)

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**Session Classification:** Presentations/Workshops