EMBRACING CHANGES TOGETHER

Contribution ID: 184 Type: Poster

Investigating the Nature of Science with Zeno's paradox

Wednesday 28 August 2024 12:20 (10 minutes)

This study presents a sequence of activities aligned with Nature of Science (NoS) principles to engage students in scientific knowledge-building, emphasizing the empirical nature of science. Designed for an experimental physics course for future teachers, the activities explore Zeno's paradox of Achilles and the tortoise. They include experimental and theoretical analyses of phenomena like the bouncing marble, aided by infinite series. Debates on whether Zeno was a scientist prompt discussions on science as a doctrine versus a process. These perspectives are further elucidated through discussions on a reconstructed Achilles'Paradox quote from Aristotle and an excerpt from Somerville's "Umbrellaology" (1941).

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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Track Classification: Experiments and Practical Work in Physics Education