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Engaging physics students in society through a Bildung-oriented physics education

Tuesday 17 June 2025 14:00 (15 minutes)

Based on the combined results of five different papers examining the relationship between physics education and Bildung, i.e. how we create physics students that engage themselves in society, this presentation presents several datasets from physics students. The presentation will also make suggestions on how we can build this engagement.

Physics students show a strong commitment to the epistemic values of science, and are open to using these also in other areas than physics. They have a strong motivation based on intrinsic interest in the subject they study, and to understand how the world works. In this they differ from e.g. engineering students who to comparison have a strong motivation toward their future profession. The distinct differences between student groups within STEM (science, technology, engineering, mathemathics), creates an argument for tailoring the teaching of Bildung-oriented or STS (science, technologi, society) aspects of the education, to the individual student groups, rather than lumping these topics together in large general courses.

This presentation will discuss how this can be done for physics students.

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