

# PHYSIKALISCHES KOLLOQUIUM

WINTERSEMESTER 2023/24

Montag, 23.10.2023, 12 Uhr c.t.

## SUPPORTING STUDENTS TO THINK CRITICALLY IN PHYSICS

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Developing students' critical thinking (CT) skills is one of the major goals of (science) education and so the need to embed critical thinking instruction in the teaching of academic disciplines in higher education has become an important focus of researchers and teachers. While for some time it was advocated to teach critical thinking separately from subject matter, this point of view became less dominant recently. Embedding CT within a subject matter domain is expected to result in initial learning of domain-specific CT skills and transfer of those learned CT skills to other domains.

Domain-specific CT refers to the ability to think critically in a domain that requires subject matter expertise, whereas domain-general CT refers to the ability to think critically in a domain that requires knowledge of everyday life.



An immediate question asks under what instructional conditions such initial learning and transfer of CT skills could happen?

In this colloquium, we start from different "definitions" of Critical Thinking in the literature and the implications for the teaching of CT skills. We then discuss some ideas on the teaching of CT in the domain of physics and a recent project on CT on the physics of climate change.

Die Einführung erfolgt durch Rainer Wackermann

**Die Fakultät lädt alle Interessierten herzlich ein. Die Veranstaltung findet im Hörsaal HZO 20 statt.**

