



Physics Colloquium

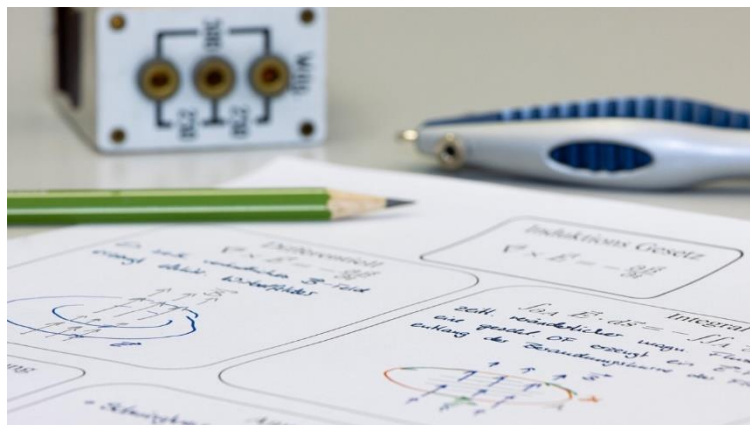
Tuesday, 14 January 2025 at 16:30

Prof. Dr. Holger Cartarius

Friedrich-Schiller-University Jena

Seminars on teaching methodology in theoretical physics courses for teacher education

While courses in theoretical physics are an essential part of study programs in teacher education and are mandatory according to the requirements of the Conference of the Ministers of Education and Cultural Affairs of the German states, they are often criticized by students as being only weakly related to their later profession. However, the structured and systematic approach of courses in theoretical physics helps to improve reasoning in teaching physics and to overcome misconceptions. In this talk I will present a series of seminars on teaching methodology introduced as compulsory parts of courses in theoretical physics for teacher education at the University of Jena. The seminars are intended to connect the concepts learned in theoretical physics with applications in school, to challenge representations used in school books, and to discuss the origin of misconceptions a large number of learners in school has. They include interactive teaching methods to activate the students.



Host: Prof. Dr. Philipp Bitzenbauer

Venue: Universität Leipzig, Faculty of Physics and Earth Sciences
04103 Leipzig, Linnéstraße 5, Small Lecture Hall

Everyone is welcome to a reception with coffee, drinks and cookies in the Aula following the talk.

For an up-to-date semester program, sign-up for the physics colloquium mailing list, and subscription to the digital calendars in CalDAV format, head to the colloquiums web page <https://www.physes.uni-leipzig.de/fakultaet/veranstaltungen>.

