



KSETA seminar

Prof. Gustavo E. Romero

(CONICET/UNLP/UNSAM, Buenos Aires, Argentina, KSETA guest scientist)

October 4 – 6, 2017 every day 10:15 – 12:30 h

(Including short break; coffee already at 10:00)

KIT Campus North, building 425, room 206

Scientific Philosophy

The course addresses the fundamental problems of scientific philosophy, that is, philosophy inspired by science. The approach is not historical but based on concrete problems and proposals for solutions to them. It will touch all major issues that matter to a scientist and that are relevant to improve the quality of your research. Among other issues, answers will be offered to such basic questions as: What is a natural law? What is a law statement? What is an event? What is probability? What is a scientific theory? How is science different from pseudoscience? What is vagueness and how to eliminate it? What is knowledge? What do we mean by understanding? What is a model and how does it differ from a theory? What is a value? What is the difference between ethics and morals? What should be the moral codes of a scientist? These and other similar questions are discussed from a modern point of view, which takes into account the latest developments in both philosophy and science. Abundant examples drawn from the physical sciences will be used. The course aims to complete the comprehensive training of scientists, teachers, and science disseminators who wish to better understand their activity.

This lecture is part of the Double Doctoral Degree in Astrophysics between UNSAM and KIT.

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