

Les Mercredis de la Boule CEMES



29 rue Jeanne-Marvig (métro Saouzelong)

Salle de Conférence

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Understanding Physics : the spirit of Science Fiction

L'esprit de la science-fiction dans l'enseignement de la physique



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During the years, P. Bernaud (Ecole Centrale, Paris) and myself have given university courses on "Physics in Science Fiction" in Vienna and Paris. The aim of these courses was to guide students to a critical thinking about basic physical principles. Participants read selected SF stories, discuss them in small groups, and are supposed to judge whether the propositions given in the stories are true of false. Students proved to be surprisingly creative when modelling scenarios *ex nihilo* (without professors' assistance) or in discovering new physical or mechanical aspects of a story. In this talk, I will give some story examples from the courses, and I will discuss our experience with students from various fields of the natural sciences.