



# COLLOQUIUM DI FISICA

**Giovedì 15 Gennaio 2015, ore 15.00**  
aula "A. Rostagni"

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## A Physics Show: for Kids, by Students

### ABSTRACT:

We discuss an outreach project which has been going on at the physics department at Bonn Germany since 2001.

This project involves many on-stage live experimental demonstrations and is aimed both at the



public and also at the university physics students in their second year. The experiments are supposed to be fun, but also educational; and all experiments are explained. Every year a new group of university physics students put on a new 2hr show aimed at kids aged 10 and older. The shows are a unique opportunity for the university students to apply their knowledge at an early stage of their studies and gets them very excited about physics. They develop the content of the show, they build new demonstration experiments and they learn how to explain them to non-physicists, in particular, children.

They also get to stand in front of more than 500 people and present what they have devised. It turns out a critical element is to embed the numerous experiments in a story line. This holds the attention of the audience much better and surprisingly also gives a unique perspective on each experiment. The show is exciting both for the audience and the students and has invigorated our physics course. We have trained more than 150 students in public presentation and outreach. With the experienced students we have devised many more advanced projects, including a show on modern, elementary particle physics, which we intend to bring to Padua in March, 2015.