

# Åbo Akademi Physics Show

- Sporadic students demonstrations in the 70's.
- More organized lectures and demonstrations began in the 90's.
- Volunteers from the department, both students and employees, visit secondary and upper secondary schools.
- Occasionally the show is held at the department and students are given a small tour.
- Starting from 2006 a one week laboration course has been held in the beginning of August.

# Funding

- Svenska tekniska vetenskapsakademien i Finland
- Resurscenter för matematik, teknik och naturvetenskap i skolan
- Physics Department

# Goals

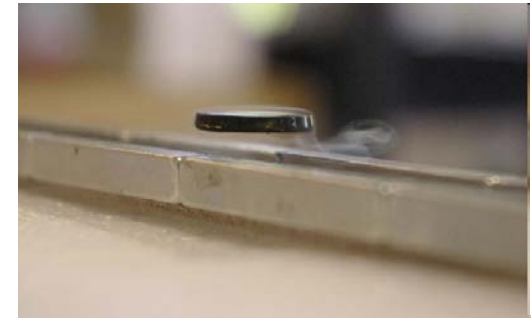
- To give upper secondary school students information about physics studies at Åbo Akademi University.
- Introduce them to the research being conducted at the physics department at ÅÅ.
- Inspire students to study physics through interesting demonstrations and by explaining that knowledge about physics is useful even if you don't aim to become a physicist.

# Ideology

- To show that science is all around us.
- Focus on experiments that initially look trivial but in the end display a fundamental property of nature.
- Experiments can be done with everyday household objects.
- DIY.

# Experiments and Demonstrations

- Liquid nitrogen demonstrations
  - Meissner effect
  - Freezing of roses
  - Bell made of lead
- Various discharge experiments with a Whimshurst's machine
- Bike wheel gyroscope
- Water bottle rocket
- Electric motors
- Non-Newtonian fluid



# Experiments and Demonstrations

- Projectile motion
- Velocity of sound
- Statistics with popcorn
- Decay of fizzy drink foam
- Lattice spacing in DVDs and CDs
- Atomic spectra
- Determination of the acceleration due to gravity
- Ruben's flame tube

