

Physikshow Uni Bonn



... a 21 year journey ... and going!



The history of an idea

- Herbi arrived in Bonn in 2000
- Since Madison, he had been thinking about something like this
- In true Herbi fashion, gave arrival lecture in Bonn on neutrinos - in local dialect

- Dec 2001 took plunge with Michael Kortmann
“We had no plan!”
35 signed up, 15 stayed
- 10 months later, Nov 2002:
first show!





Basic idea

- Present entertaining & educational experiments for kids aged 9-99
- Students develop & present show - take ownership
- Opportunity to apply physics knowledge and other skills
- Originally - new group with a new show every year
 - New theme, new story, (some) new experiments
 - 3 performances in September and 3 in March (same show)



















Outreach - why?

Herbi's approach and philosophy:

- Create excitement about science & research
- Build support for science
- Bring kids into science
- Teach public about science
 - cultural value
- Give back - pay forward



Does it work?



- Show fill the 550 seat Bonn lecture hall pretty much every show - families, children, school classes!
- People keep coming back (including my parents)
- The 'Physikshow' as a family

Particle Physics Show



Really ambitious project: How do we do modern physics?

2004, first attempt, for “50 Years of CERN” celebration in Bonn, with Profs. Kobel & Paul

Spring 2008: hired by BMBF to perform at national LHC exhibit in Berlin subway station (Weltmaschine); revamped the show







www.uni-bonn.de



Shows and 'specials'



(the 'early years' up to 2012)

- Deutsches Museum, München in '06 and '09
- DESY Hamburg 2009
- CERN 2010

... and these were just the big specials - fully 'on tour'





Build new experiments







Prizes!

- 2009 European Physical Society High Energy Physics Outreach Prize
- 2006 Bonn University Alumni Prize
- 2021 Bonn University Student Initiative Prize



European Physical Society
Honorary Member

2008 Oskar Klein
Michael Rosen

European Physical Society
Honorary Member

2009 Oskar Klein
Herbert Dreier

European Physical Society diploma

The Board of the High Energy Physics Division of the European Physical Society
is pleased to announce the award of the

2009 Outreach Prize

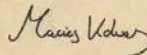
to

Herbert Dreiner

Rheinische Friedrich-Wilhelms-Universität Bonn, Germany

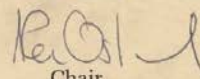
(Michael Kortmann got one too!)

Maciej Kolwas



President
European Physical Society

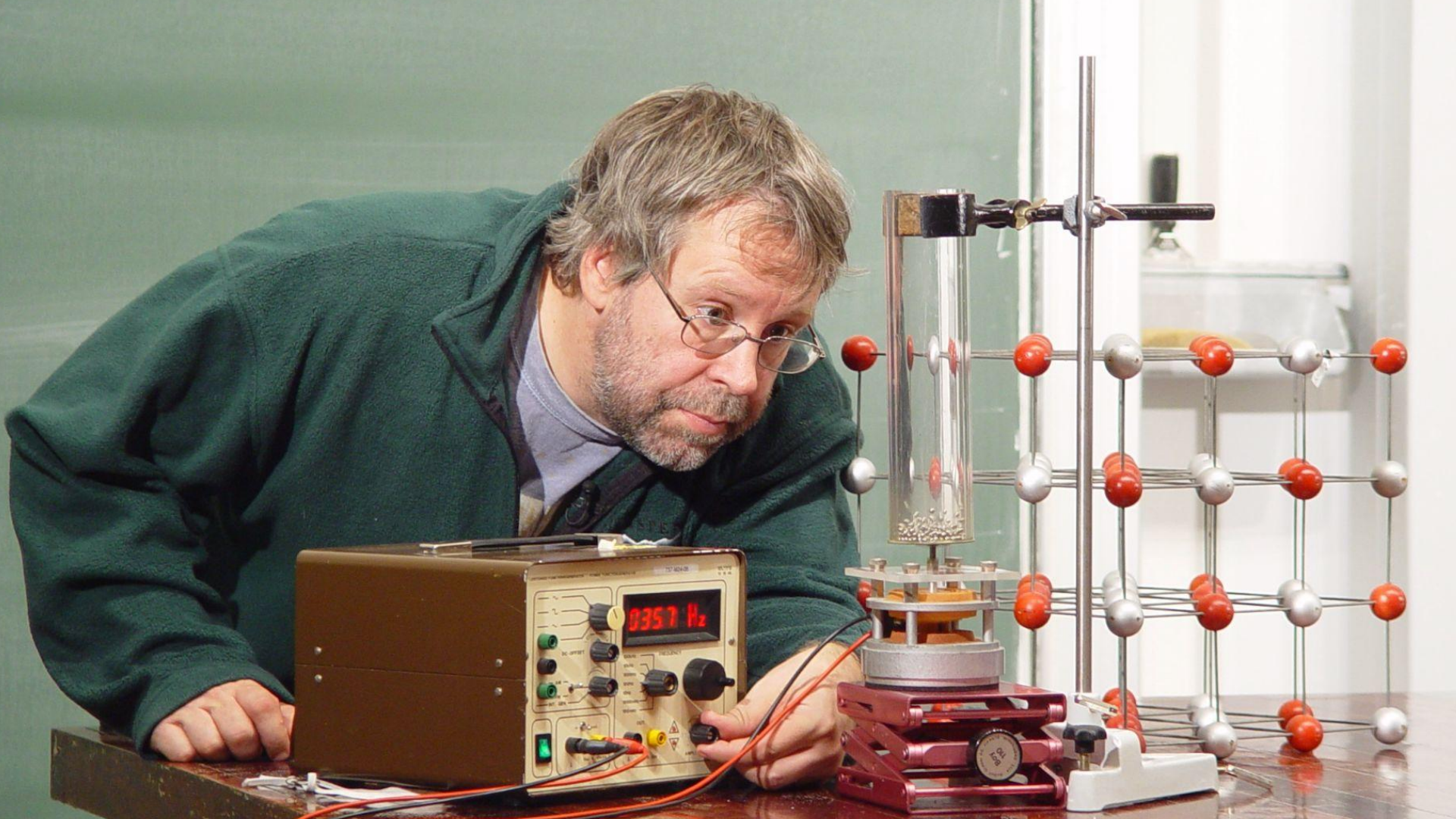
Per Osland



Chair
European Physical Society / HEPD

Cracow, Poland, 20 July 2009







At The Squid! we get better
THE SQUID!
© 2010 Squid! Inc. All rights reserved.

Bayer



Nota bene



Literature

- **A Physics Show performed by Students for Kids: from Mechanics to Elementary Particle Physics;**
e-Print: physics/0701344
The Physics Teacher **46** (2008) 358
- **It's Physikshow time in Germany**
CERN Courier, October 2007 (available online)
- **Fun Physics in School: Students perform for Students**
Science in School **9** (2008) 46
- **What's (the) Matter?**
An elementary particle physics show with 28 live experiments
(arXiv:1607.07478)
- **Planetamos - a Physics Show Musical**
A planetary science show with 14 live experiments, live orchestra, live songs
(arXiv:2201.10968)

