

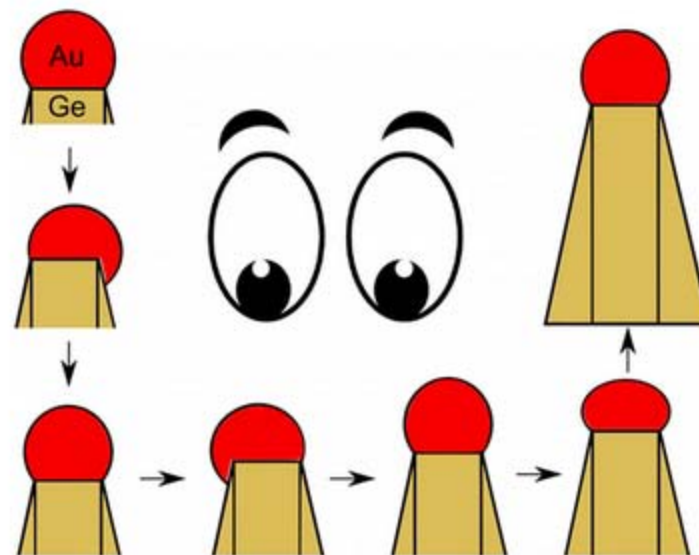
16th IUVSTA Summer School
on
Physics at Nanoscale

Devět Skal, Czech Republic
12th - 1st June 2017



- Main
- About
- Programme
- Speakers
- Contacts
- Organizers
- Sponsors

Download **School flyer** or **Poster**



The school aims at presenting current trends of research at both tutorial as well as state-of-the-art level. The school will also connect the fundamental research to the vital areas of technology: nano-electronics, renewable energy and life science applications.

Antonín Fejfar (school co-chair)

Institute of Physics, Academy of Sciences of the Czech Republic, Cukrovarnická 10, 162 53 Prague 6, Czech Republic

Tomáš Šikola (school co-chair)

Institute of Physical Engineering, Faculty of Mechanical Engineering, Brno University of Technology, Technická 2, 616 69 Brno, Czech Republic

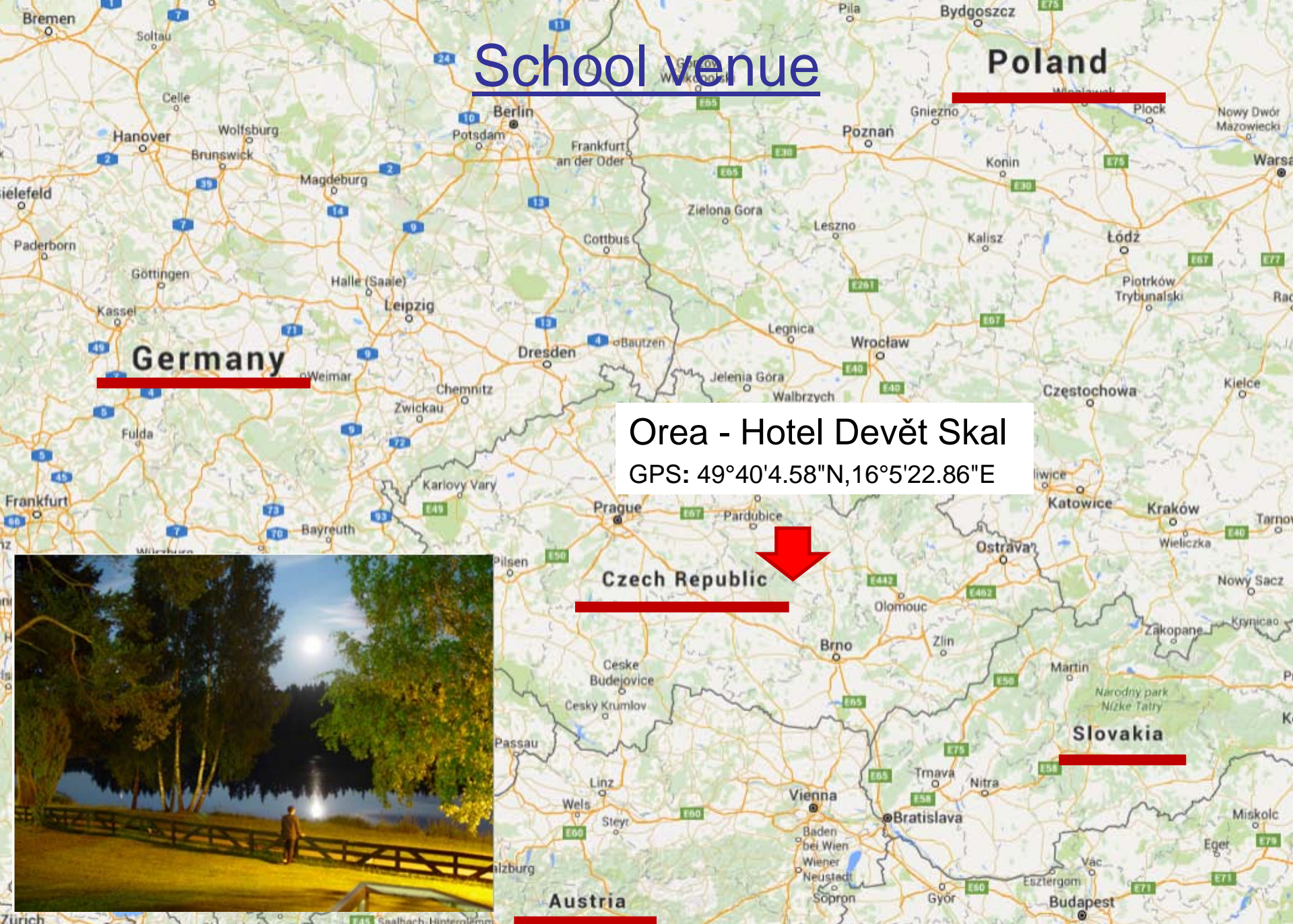
The school is organized jointly by **Institute of Physical Engineering FME BUT, CEITEC, Institute of Physics ASCR, Czech Physical Society** and **Czech Vacuum Society** as the 16th International Summer School of **IUVSTA** which endorsed it through its **Nanometer Structures Division**. Part of the school dedicated to the solar energy utilization will focus on the recent developments of the high efficiency solar cells within the Horizon 2020 project **NextBase** and it is twinned with the **Photovoltaic Systems Summer School 2017** organized by TU Delft.



School webpage:

<http://iss.fzu.cz/>

School venue



Orea - Hotel Devět Skal

GPS: 49°40'4.58"N,16°5'22.86"E

The school attendees

150 people (14 speakers, 112 participants, 24 company representative)
from 18 countries:

Austria, Belgium, China, Czech Republic, France,
Germany, India, Iran, Israel, Italy, Luxembourg, Poland,
Russia, Slovenia, Spain, Switzerland, the Netherlands and
U.S.A.

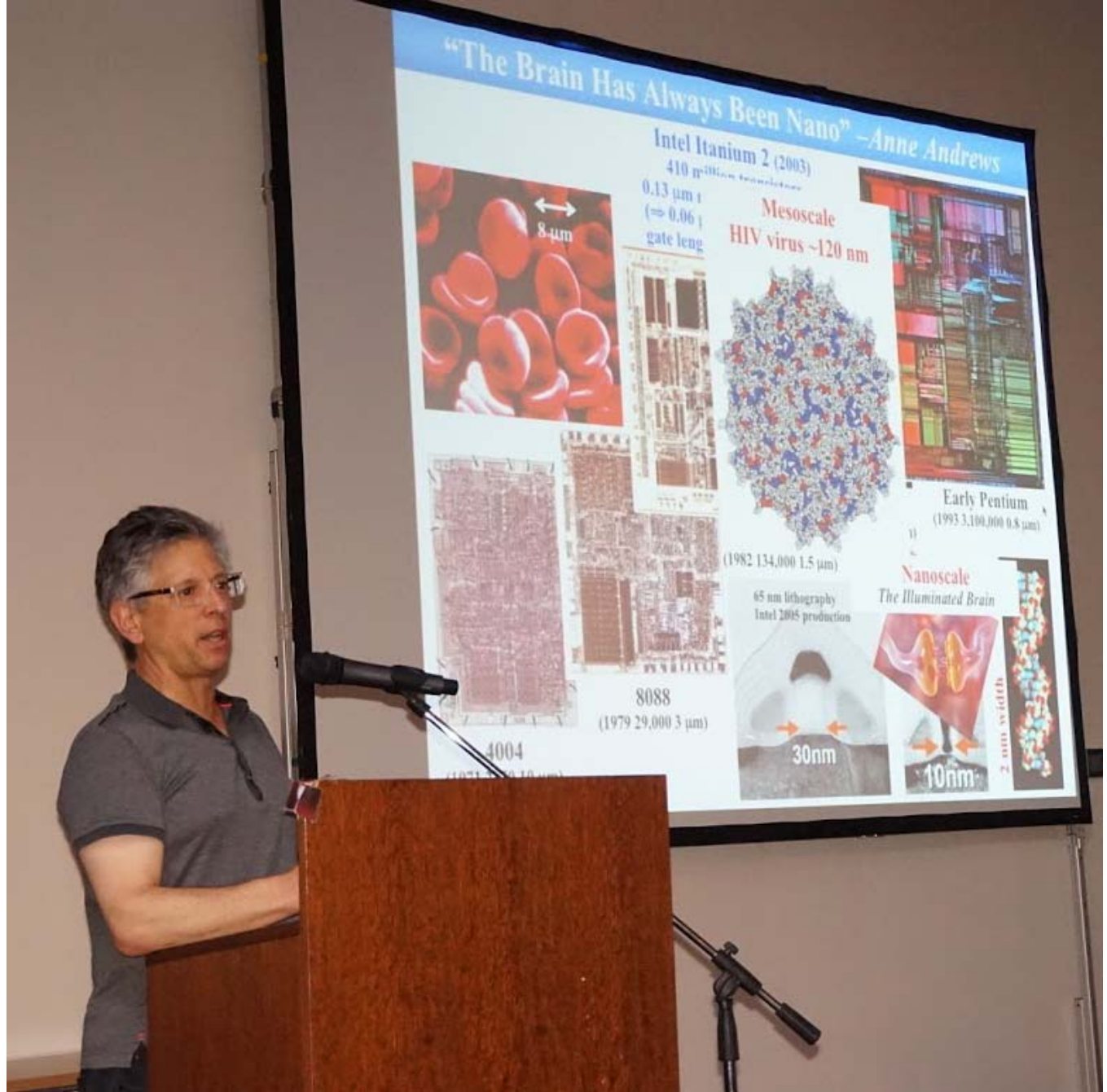


Arrivals




Paul S Weiss:

The Brain
Has Always
Been Nano




Dave Cahen




WIZMANN INSTITUTE OF SCIENCE  IUVSTA School 6-2017

The amazing last decade in Solar Cells

 with
P.K. Nayak (U. of Oxford)

thanks to
G. Hodes, R. Milo, M. Green (UNSW), A. Kahn (PU) +++

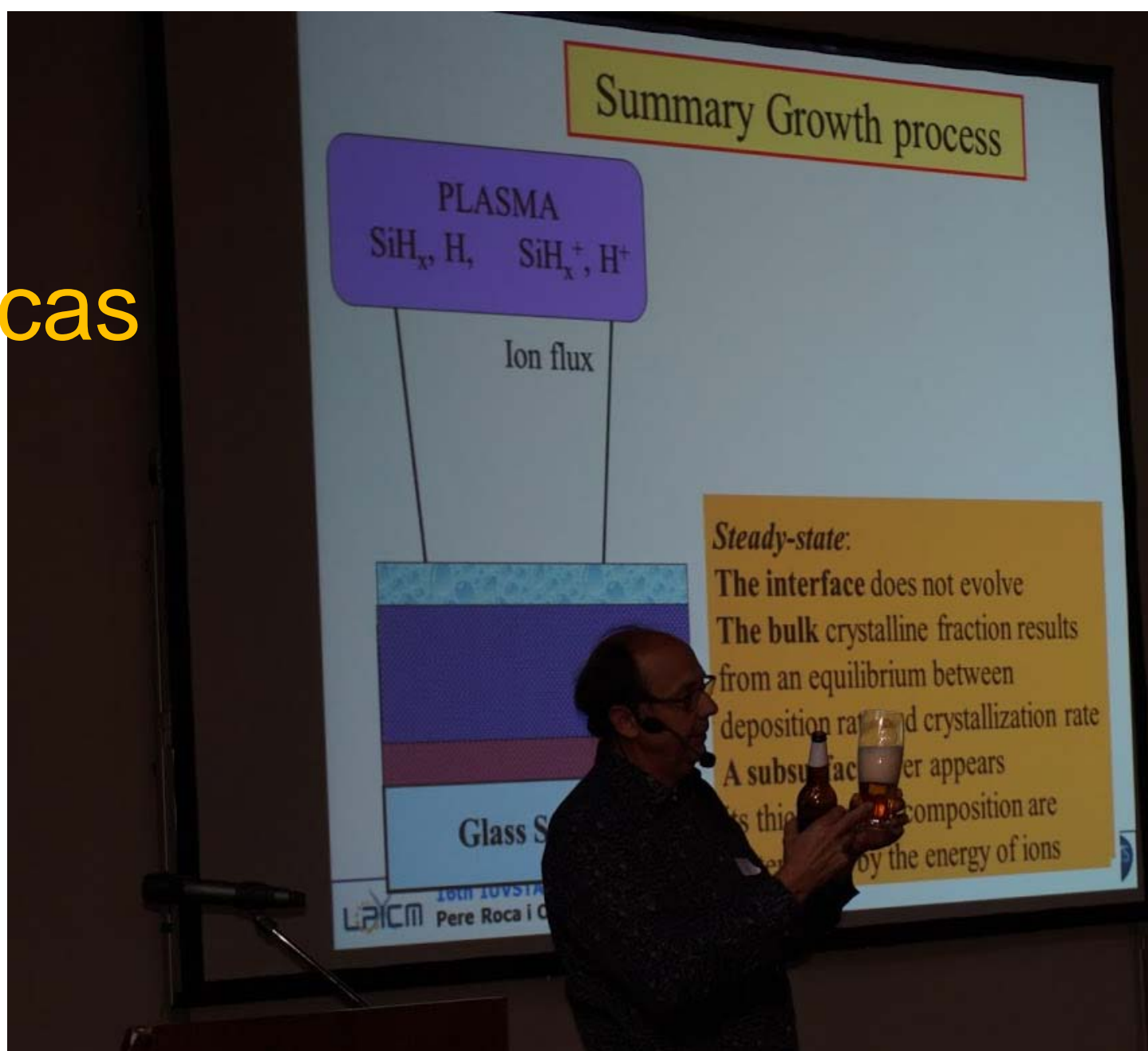
funding from
SAERI (WIS); Israel: Min. of Sci. & Technol. & Nat'l. NanoInitiative

 Sustainability
And
Energy
Research
Initiative

Cahen group WIS 2017

Pere Roca i Cabarrocas

Growth experiments on stage



Gareth Parkinson:

Iron oxides are all around us



Erik Reimhult



Bionanotechnology/science is an interdisciplinary field:
we need people from all fields and backgrounds

Physics ← Chemistry

Material-Sciences → Biology

WARNING
CRAZY CHEMIST AT WORK

The Department of Nanobiotechnology

B. Reimhult

Poster session





Discussion





and more ...





Olivier Martin



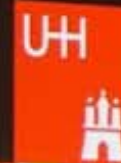


and the audience ...

An SP-STM View of Antiferromagnets: From the Smallest Building Units to Model-Type Atomic-Scale Spintronic Devices



Roland Wiesendanger
Interdisciplinary Nanoscience Center
University of Hamburg, D-20355 Hamburg, Germany



Excursion



Company evening



Afternoons



Evenings



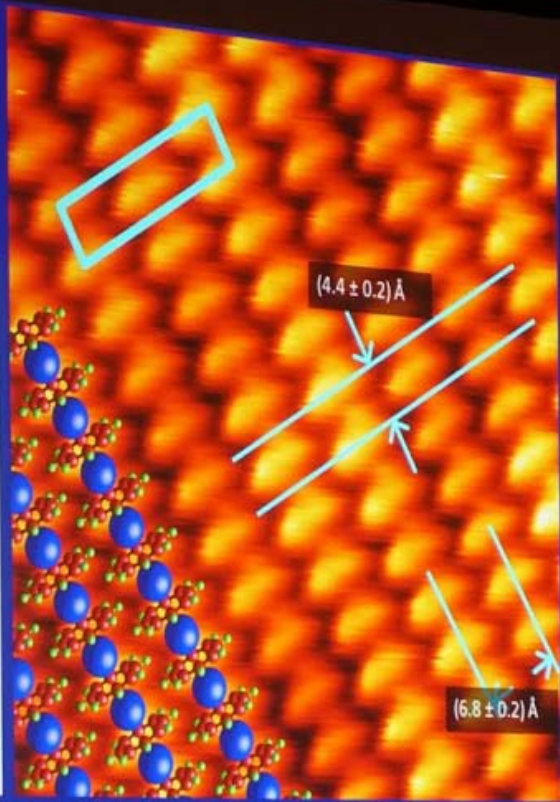
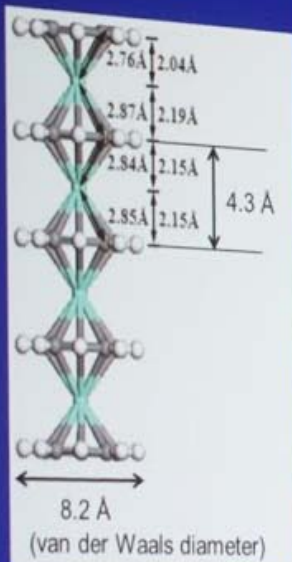
Panel discussion



I

Wire structure

DFT [1]:



[1] K. Xu et al. J. Chem. Phys. 131, 104704 (2009)

Summary:

- Metallic ferrimagnets: heat-in driven switching
- Multilayers with strong spin-motion by inverse Faraday effect
- Dielectric: non-thermal, a crystal field spin-orbit



Radboud University



Poster awards



- S. Lancaster et al: Boron incorporation in GaAs nanowires grown by molecular beam epitaxy
- J. Rozbořil et al. Magneto-optical properties of single molecular magnet thin films)
- M. Horký et al: Magnetic phase transition asymetry dependent on the spatial confinement of FeRh patterns.