# International Summer School on Physics at Nanoscale

Nanostructures, Surfaces and Thin Films
Nano-Optics and Photonics
Nanolectronics and Spintronics
Nanostructured Energy Conversion Devices

. . .

Skalský Dvůr, Czech Republic 1<sup>st</sup> - 6<sup>th</sup> June 2020



# Part of the series of schools held every 3 years:

16<sup>th</sup> IUVSTA summer school 2017

<u>International summer school 2014</u>

10th IUVSTA summer school 2011

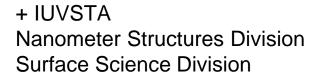
9th IUVSTA summer school 2008

8th IUVSTA summer school 2005

International summer school 2002

### Organizers

- Organized by consortium:
  - Central European Institute of Technology
  - Czech Academy of Sciences
  - Universities:
    - Prague (2), Brno (2), Ústí nad Labem
  - Societies:
    - · Czech Physical Society, Czech Vacuum Society























### Dedication



One of the key organizers used to be late Peter Varga, who took part in all schools listed above and even before, as the school history is longer, reaching back to 1990. His role was so significant that we would like to dedicate the school to him.

Institut für Angewandte Physik

TU Wien » Institut für Angewandte Physik » Surface Physics » Group Members :

Peter Varga

# summer school: http://iss.fzu.cz/

International Summer School on **Physics at Nanoscale** 

> 9th - 14th June 2014 Devět Skal, Czech Republic

#### School flyer download



Prof. Lars **Montelius** lecturing at the school in 2014

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

The school was organized jointly by CEITEC and Institute of Physics ASCR. The school is part of activities of the Czech Nanoteam. The school organization relies on the Czech Physical Society and Czech Vacuum Society and last, but not least, a group of academic research institutes and universities.

We are glad that the school was successful!

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

#### **Organizers**

Czech Nanoteam

Institute of Physics AS CR

Brno University of Technology CEITEC

Charles University

Masaryk University

**Czech Technical University** 

J. E. Purkinje University

Czech Physical Society

Czech Vacuum Society

#### Sponsors

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Ion TOF

MT-M

Omicron NanoTechnology

ON Semiconductor

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Pfeiffer Vacuum Austria

Raith

RMT

Sigma Aldrich

Specion

SPECS

**TESCAN ORSAY HOLDING** 

**Uni-Export Instruments** 

Vakuum Praha

WITec



Main

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Sponsors

Yehiam Prior Weizmann Ins. Of Science

#### **Non Linear Optics**



Silke Christiansen, Max Planck Institut für die Physik des Lichts, Freie Universitat Berlin

#### Photonic nanostructures



# Invited speakers for 2020



Heike Riel,
IBM Zurich, Switzerland
<a href="http://researcher.ibm.com/researcher/view.php?person=zurich-hei">http://researcher.ibm.com/researcher/view.php?person=zurich-hei</a>

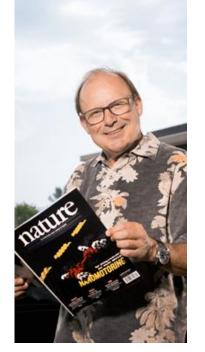
#### **Nanoelectronics**



Pietro Gambardella, ETH Zurich, Switzerland

Nanomagnetism and spintronics





### Speakers (cont.)

Karl Heinz Ernst
EMPA
Molecules
on Surface



#### **Nano-Optics**





Guus Rijnders, Uni Twente

#### Thin film depositions

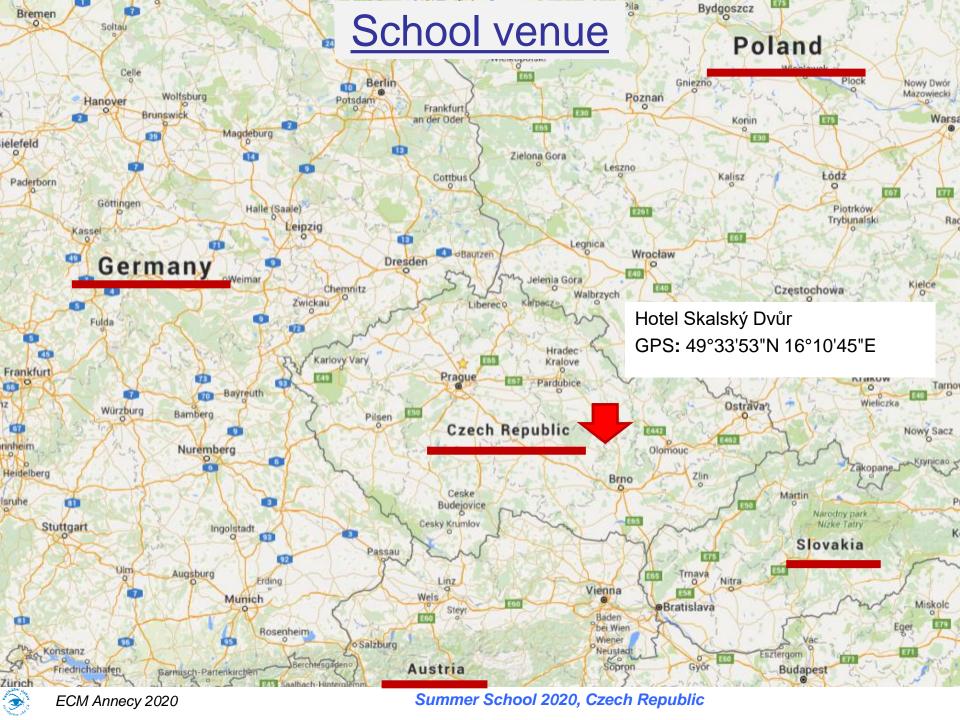


Marc Chaigneau · 1st

AFM-Raman Product Manager chez HORIBA Scientific

#### Tip enhanced spectroscopies





TITLE: Physics at Nanoscale	Skalsky Dvur, Czech Republic			DATE: June 1 <sup>st</sup> - June 6 <sup>th</sup> , 2020
Income	Unit cost (EUR)	Quantity	Sub-Total (EUR)	Remarks
Registration Fee (per person)	340	90	30 600	90 registered participants
TVS funding (Czech Physical Society, projects)	9 200	1	9 200	estimated, under progress
sponsoring (by companies listed in the application)	600	9	5 400	estimate based on the past experience
IUVSTA funding	9 000	1	9 000	
Total (EUF	R)		54 200	
Expenditures	Unit cost (EUR)	Quantity	Sub-Total (EUR)	Remarks
Meals (5 days per person) **	110	105	11 550	Lunch breaks, Dinner breaks, and Coffee breaks
Excursion (per person) **	20	105	2 100	Transportation and Tickets
Welcome mixer and banquet (per person) **	40	105	4 200	
Meeting Rooms (per event)	900	2	1 800	
Hotel Rooms (4 nights per invited speaker)	600	15	9 000	
Participants accommodation	150	90	13 500	
Announcements and web page	850	1	850	
Temporary Labors (per person)	0	0	0	
Miscellaneous	0	0	0	
Airticket partial funding (Europe, per person)	400	10	4 000	Partial funding for 10 invited speakers on request
Airticket partial funding (Asia, US, per person)***	1 800	4	7 200	Partial funding for 4 invited speakers on request
Total (EUF	R)		54 200	



# Hotel Skalský Dvůr

Relaxing Environment, for study, relaxation and teaming

# Excursions

- Medieval castle Pernštejn
- UNESCO World Heritage <u>Zelena hora</u>





Participants
Intended for Ph.D. students and young researchers

Typical attendance: over 120 people (students, speakers, company people).





# Corona virus

In spite of the current COVID-19 pandemics (and many scientific meetings already cancelled) we still plan to hold the school, with following contingency plan:

- the school may take place with attendance limited to local audience (CEITEC and Czech Academy of Sciences).
- distant lecturers present through teleconferencing
- Self study groups of the students

We verified the necessary conditions:

- Broad band internet connection
- Space for organizing the student groups

We believe we should think in advance and find ways how to function under the changed circumstances.



# Thank you for your attention and we hope for your support

