



University  
of Basel

Department  
of Physics



# Invitation Farewell Lecture Prof. Christian Schönenberger

Friday, October 4, 2024 at 3:15 p.m.  
Department of Physics, large lecture hall 1.03,  
St. Johanns-Ring 25, 4056 Basel

# Invitation from the head of the Department of Physics

to university lecturers, students and  
all those interested in science



**Farewell Lecture**  
**Prof. Dr. Christian Schöenberger**  
**Friday, October 4, 2024 at 3:15 p.m.**

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**3:15 p.m.**

**Welcome address**

Head of the Department of Physics

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**3:20 p.m.**

**Greetings**

Prof. Dr. Andrea Schenker-Wicki  
President of the University of Basel

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**3:30 p.m.**

**Laudatio**

Dr. Takis Kontos  
ENS Paris and Research director at CNRS

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**4 p.m.**

**Farewell Lecture**  
**«Thirty Years of Research in Nano  
and Quantum Science»**

Prof. Christian Schöenberger

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**4:45 p.m.**

**Apéro**

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Physics Department, large lecture hall 1.03,  
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**Registration under:**

<https://form.jotform.com/physikunibas/farewell-lecture-Ch-Schoenenberger>  
or via QR code

## **Thirty Years of Research in Nano and Quantum Science**

**Abstract:** «I will start by reflecting on my somewhat unusual career path from an apprentice in electronics to a professor in physics. All my years I enjoyed the freedom in choosing my way to explore new grounds. Of particular importance for Basel was the push to interdisciplinary research when launching the NCCR on Nanoscale Science. This project was unique in that it assembled researchers from biology, chemistry, physics, engineering, medicine and even the social sciences. The visionary mind behind was Hans-Joachim Güntherodt who was an inspiring role model for many in the Department of Physics. The NCCR led to the Swiss Nanoscience Institute which I had the privilege to shape and help steering it in the right direction (I hope). Science wise my group has been working on many different topics here in Basel. I am thus unable to review them. Instead, I will choose a few examples to illustrate the interdisciplinary nature of our research and I hope that I can share my excitement with you. I have selected one topic for which I will devote a bit more time. It is work that started right with my first PhD students in Basel. It is the Hanbury-Brown Twiss experiment with electrons. It is a quite fundamental piece of work and one that can easily be explained to non-physicists (we'll see).»

## **Christian Schönenberger**

is both an electrical engineer and a physicist by training. He worked at the ETH Zurich, the IBM Zurich Research Laboratory and later at the Philips Research Laboratory in Eindhoven. Since 1995 he is a full professor in experimental physics at the Department of Physics of the University of Basel. He was a co-initiator of the Swiss Nanoscience Institute [nanoscience.unibas.ch](http://nanoscience.unibas.ch) and until summer 2022 its director. Christian Schönenberger is a fellow of the American Physical Society, a life-time member of the Swiss Academy of Technical Sciences (SATW), a member of the commission of the FAG and a recipient of two ERC Advanced Grants. His research has been focused on electrical properties of nano-scaled quantum devices. Such devices are currently central in developing quantum computers and other quantum-based electronic applications. In their research, the group has often explored fundamental quantum effects in new material systems with reduced dimensions.

[nanoelectronics.unibas.ch](http://nanoelectronics.unibas.ch)



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