Berlin 2018 – AIW Wednesday

## AIW 1: Industry Day: One Idea Ahead (joint session AKjDPG/AKC/AIW)

The intension of the Industry Day is to give a broad overview about how innovative physics plays a role in small companies and start-ups. Four economic professionals will demonstrate how they apply physics in business. They will present their enterprises and talk about their ideas which led to the founding process. The focus lies on small and medium-sized companies and ranges from technically oriented start-ups to engineering consulting firms. In an ensuing panel discussion different ways and possibilities for enterprise foundation will be discussed and the attendees are invited to ask questions. Finally, there will be a cozy gathering with "Bier and Brez'n" for more discussion, questions as well as for networking and socializing.

Organised by: Karl-Philipp Strunk (AIW), Susanne Kränkl (AKC), Matthias Dahlmanns (jDPG)

Time: Wednesday 15:00–19:00 Location: E 020

Founding your own company and becoming independent is an idea that seems to inspire more and more people. But how exactly do you do that? What qualifies a physicist to start a business? How do you get the decisive idea? To what extent do you need to be an economist? These are questions that I hear quite often. In this talk I will describe my way from science to business and take a look at the aspects of planning and strategy but also at the moments where luck and chance played an important part. I will also explain what kind of service my company provides and what customers we work with

Imaging and spectroscopy are widely used methods to reveal both known and unknown phenomena in physics, chemistry, biology, material science, forensic, and other subjects. Applications in science and industry are manifold. Any detector as part of an optical system (microscope, spectroscope, \* )plays a crucial role for the quality and significance of the measurement result. Improvements on its resolution, quantum efficiency, system noise, or vacuum compatibility can have a great impact.

greateyes - a spin-off from Humboldt University of Berlin - develops, manufactures, and markets scientific high-performance cameras for low light applications from the X-ray to the NIR region with a focus on the non-visible range. The talk intends to give a brief insight in the physical, electrical and even mechanical challenges when optimising detectors for cutting-edge physical experiments. The company's SuperResolution product innovation is given as an example. Furthermore high-repetition-rate spectroscopy and photoluminescence imaging of as-cut wafers are being discussed.

Founded in 2008, greateyes quickly developed into an international acting company. Today it has strong customers in research and industry all around the globe.

15 min. coffee break

Starting from the simple idea that decision making works better if it's algorithm-based, the three physicists Heiko Schmidle, Christian Graf and Markus Düttmann ventured into the Berlin tech scene. They founded the company realzeit, a Berlin-based adtech startup. A programmatic DSP, realzeit is a real-time bidding platform built on complex algorithms for targeting potential customers, optimising budgets, and clustering ad inventory and users.

The company has since been acquired by the growth marketing company DCMN, where the three physicists continue to work on building great technology products. Markus will give some insights into his career path after university and will provide a glimpse into Berlin's startup scene.

Invited Talk AIW 1.4 Wed 16:45 E 020 Medical applications of high power laser diodes — ◆TILMANN TREBST — LifePhotonic GmbH

In the last decades lasers have become reliable tools in the daily clinical routine. The still progressing development of new laser diodes with a multitude of wavelengths and increasing power supports this trend and opens up new applications. A few examples of successful laser treatments will be presented while discussing options and requirements for lasers and fiber based applications systems.

Discussion AIW 1.5 Wed 17:15 E 020 Discussion — ◆Karl-Philipp Strunk — DPG, Working Group on Industry and Business (AIW)

During the previous talks, different ways and possibilities for enterprise foundation where presented. Now it's time to discuss and to give the opportunity for asking questions about this wide topic to the four speakers.

At the end of the industry day everyone is invited to a more informal get-together with Bier and Brez'n.