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Prof. Kirschbaum (right) with Vice-Rector Hurtado, the brewing team with Prof. Henle (3rd from the right) and Prof. Weigand (2nd row in the centre), Prof. Neinhuis (left) and musician Peter Till.

EVENTS
Chasing particles 2 km underground with Nobel laureate Arthur McDonald

This year's lecture series "Nobelpreisträger zu Gast an der TU Dresden" ended successfully with the talk of the Canadian particle physicist Arthur B. McDonald on 28th June. In 2015, McDonald was awarded the Nobel Prize in Physics together with Takaaki Kajita from Japan. In large-scale experiments both researchers succeeded in proving that neutrinos – often referred to as "ghost particles" – have mass; a fact contradictory to the Standard Model of Elementary Particle Physics. More than 1.000 people came to the public lecture and were fascinated by McDonald's work at the Sudbury Neutrino Observatory (SNO) 2 km below the Earth's surface. With many humorous anecdotes about his research and images about his life as a scientific „celebrity“, e.g. when he visited the American programme "Big Bang Theory" as "Geek of the Week", he entertained his audience to the outmost. What a vibrating finale of this year's lecture series. You can find all images and information of the series „Nobelpreisträger zu Gast an der TU Dresden“ at <https://tu-dresden.de/mn/nobel>



With the halo of the universe: Arthur McDonald. Copyright: Sven Döring

Topping out ceremony for particle accelerator in Felsenkeller Dresden

Professor Kai Zuber likewise has been a member of the international Sudbury Neutrino Observatory research team for 15 years. In future, Professor Zuber and his colleague Daniel Bemmerer of the Helmholtz-Zentrum Dresden-Rossendorf are looking forward to the particle chase – maybe not 2km, but none the less 50 meters underground. In the Southwest outskirts of Dresden, a unique research site is developing in two tunnels of the former Felsenkeller-Brewery ice storage. In April, a Pelletron-accelerator was installed in Germany's deepest particle laboratory. The topping out ceremony of the accelerator laboratory will take place on the 28th of June 2017 with Arthur McDonald as keynote speaker.



According to its former usage of the Felsenkeller, chilled beer was served at the topping out ceremony. From the left: Arthur McDonald, Rector Hans Müller-Steinhagen und physicist Kai Zuber. Copyright: Nicole Gierig

Networking workshop of the School of Science at the Botanical Garden

Summer, sun, palm trees, paella and home-brewed beer – what sounds like summer holidays was part of the first School of Science professors meeting at the Botanical Garden on 26 June. In the frame of the organisation and formation of the School of Science, Chairman Prof. Clemens Kirschbaum invited the professors of the school to meet in a relaxed atmosphere, getting to know each other, exchanging ideas and research interests. Prof. Kirschbaum also surprised the guests with the one or other special feature. The Department of Chemistry and Food Chemistry presented two flavours of their self-made beer, the Vice-

TEACHING METHOD OF THE MONTH

The murmur-group

Lectures with high information density risk faster fatigue and limited learning capacity of students.

How can we incorporate lecture-pauses which at the same time can be used by students as a learning or preparation break?

How does the method work?

The murmur-group is a flexible method in which small discussion groups can gather ideas or find a common position within a few minutes. If you would like to find out more about this learning method you will find a detailed description [here](#). The Centre for Continuing Education is happy to assist you in your planning and implementation. Please feel free to contact us! (Contact: [Team Hochschuldidaktik](#))

Rector for University Development cooked live an original Spanish paella and musician Peter Till entertained the event with his "Universal-Druckluftorchester". Even the Rector took the chance of participating in the networking event after his last appointment later in the evening. Many of the participants expressed their gratitude for this new kind of event at the School of Science and hence, this will certainly not be the last one. Find more images and information at:

<https://tu-dresden.de/mn/der-bereich/news/1-netzwerktreffen-mn-im-botanischen-garten>



*Chemistry meets physics: from the left: Prof. Stumpf, Prof. Henle, Prof. Brunner, Prof. Weigand, Prof. Ketzmerick and Prof. Ruck.
Copyright: Nicole Gierig*

RESEARCH

Award of the Commerzbank Foundation for physicist Dr. Alrun Hauke

On June 30, the Commerzbank Dresden awarded two dissertation prizes of the Commerzbank as well as the Dr.-Walter-Seipp-Prize for extraordinary dissertations of young researchers from TU Dresden. This year, the 4.000 Euro endowed Dr.-Walter-Seipp-Prize of the Commerzbank-Foundation went to Dr. Alrun Aline Hauke for her dissertation "Vertical Organic Field-Effect Transistors

– On the Understanding of a Novel Device Concept". Her research at the Institute of Applied Physics (IAP) headed by Professor Karl Leo focused on the field of organic electronics. Dr. Hauke's work contributed towards a better understanding of the operating principle of a novel organic transistor and the improvement of this component. One of the dissertation prizes of the Commerzbank and 1.000 Euro prize money were awarded Dr. Paul Müller, BIOTEC/ School of Science. Dr. Paul Müller obtained his doctorate at the Biotechnology Center of TU Dresden (BIOTEC) with the topic "Optische Beugungstomographie von einzelnen Zellen". Unlike traditional computer tomography, which enables 3-D-reconstruction of tissue through x-rays, Dr. Müller's thesis focuses on 3-D-reconstruction of individual biological cells through light

NSF Young Academics Award goes to Sarah Jurk and Sören Kuitunen-Paul

For their joint publication *Personality and Substance Use: Psychometric Evaluation and Validation of the Substance Use Risk Profile Scale (SURPS) in English, Irish, French, and German Adolescents* in the scientific journal *Alcoholism: Clinical and Experimental Research (ACER)*, Sarah Jurk and Sören Kuitunen-Paul of the Institute for Clinical Psychology and Psychotherapy were awarded the 1st Young Academics Award of the "Norddeutscher Suchtforschungsverbund (NSF e.V.)". The prize is endowed with 500 Euro. The award ceremony took place on May 10, 2017 during the 23rd NSF-Symposium in Hannover.

Master's Thesis awarded distinction at Open Topic Chair Stochastic Analysis and Financial Mathematics

On 15 June, the mathematician Tom Spiegler, who is a member of staff at the Open Topic Chair "Stochastic Analysis and Financial Mathematics", received the N.J. Lehmann Prize for his master's thesis "Principal Component Pursuits Applied to Financial Data". The prize, which is named after the Saxon computer pioneer Nikolaus J. Lehmann and is endowed with 2.000 Euro, is awarded every two years for a thesis on the subjects of computer analysis and the mathematical fundamentals of computer science. In his Master's thesis, Tom Spiegler developed an innovative method for the efficient analysis of high-dimensional data. In addition to the theoretical foundations, it was possible to gain new insights into the network structure of the European financial markets.

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E-LEARNING

E-Scouts offer support in designing your flexible study course

The project "Studiengänge flexibel gestalten" – *creating flexible study programmes* – forms part of the "successful study concept" of the TU Dresden, and aims primarily at teaching staff already working in the field of Science, Technology, Engineering and Mathematics (STEM). The goal is to enable more flexible and individual studies in undergraduate degree programmes. E-Learning-components should enhance the existing range of courses and create a more flexible and individual study environment, without revolutionizing traditional full-time study programmes.

This should prevent students from having to give up their studies due to financial situations or family obligations.

The E-Scouts are happy to assist you in implementing your ideas. E-Scouts are student assistants, trained and guided by the Media Centre within the project "Studiengänge flexibel gestalten". They will enter the content into the respective e-learning tool for you and maintain it thereafter. If you would like to enhance your course with e-learning elements, please contact Jana Riedel (jana.riedel@tu-dresden.de) and Susan Berthold (susan.berthold@tu-dresden.de) at the Media Centre.



Dresden Senior Fellow Prof. Dr. George S. Nolas. Copyright: private

DRESDEN Senior Fellow

Prof. Dr. George S. Nolas of the University of South Florida in Tampa, USA, stayed as a **DRESDEN Senior Fellow** at the Chair of Inorganic Chemistry from 29th of May until 24th June 2017. Professor Nolas is one of the world's leading scientists in the field of thermoelectric materials. During his stay, Prof. Nolas held three special lectures about the topic area of "Materials for the 21st century" and a public lecture themed "Holey Semiconductors: Materials of Technological and Scientific Interest."

STUDY

Find your well-being online – psychological study looks for female participants

A hypercritical consideration of their own body hinders many women from enjoying their lives and reaching their personal and professional goals. The Department of Psychology at TU Dresden now offers the online programme „everyBody“, which helps women in becoming more self-confident and in getting a better physical well-being. How that works? The participants of the programme learn to discover their strength, to deal with criticism and to find their personal comfortable weight. A balanced nutrition according to the actual needs of the body and regular exercise play an important role. everyBody is offered for free for women from the age of 18 in the scope of a study. More information and the registration link can be found on the homepage www.icare-online.eu/de/everybody.html"

GUEST RESEARCHER PROGRAMMES

Alexander von Humboldt Foundation Fellows

In March 2017, **Dr. Mirian Casco** joined the research group of chemistry professor Stefan Kaskel, where she stay as a Humboldt fellow for the next 12 months. In her research project "Synthesis of high-performance activated carbons using a green chemical approach: mechanochemistry", Dr. Casco will investigate a new path in the field of high-performance carbon materials. Mechanochemical synthesis could reduce the usage of corrosive chemicals as well as forgo the necessary heating. This would save time and money and could create a more efficient and cleaner production of high-capacity active coal.



Dr. Mirian Casco. Copyright: private

Dr. Dan Sathiaraj Gunasekaran of the "Indian Institute of Technology Hyderabad" is doing research on High Entropy Alloys (HEAs) at the Chair of Metal Physics under Professor Dr. Werner Skrotzki. Due to the exceptional characteristics, HEAs are regarded as promising multifunctional materials and the next generation of structural materials. Dr. Gunasekaran joined the research group in May 2017 and will spend 24 months in all, focusing on cryogenic deformation temperature ($4K < T < 300K$) of HEAs. The aim of his research in the field of "Metallurgical and Thermal Processes and Thermomechanical Treatment of Materials", is to understand the deformation mechanisms of this new material class.



Dan Sathiaraj Gunasekaran. Copyright: private