

Issue 23

September 2021

NEWS

"The temptation to form premature theories upon insufficient data is the bane of our profession"

- **Sherlock Holmes** (fictional character created by British writer and physician **Arthur Conan Doyle**)

Latest Highlights

New Publications

- P. Tillmann, B. Bläsi, S. Burger, M. Hammerschmidt, O. Höhn, C. Becker, and Klaus Jäger (2021). **Optimizing metal grating back reflectors for III-V-on-silicon multijunction solar cells.** *Opt. Express*, Vol.29, p. 22517. doi: [10.1364/OE.426761](https://doi.org/10.1364/OE.426761)
- P. Rautenstrauch, A.H.C. Vlot, S. Saran, and U. Ohler (2021). **Intricacies of single-cell multi-omics data integration.** *Trends in Genetics*.
<https://doi.org/10.1016/j.tig.2021.08.012>

Conferences

- J. Nordin, N. Miranda, V. Brinnel, and J. van Santen. **The AMPEL System as an Official VRO Community Broker: Current Developments and Applications.** (Oral presentation), *Virtual Annual Meeting of the German Astronomical Society*, 13-17 September, 2021.
- T. Gimm, X. Wang, K. Palczynski, A. Bande, and J. Dzubiella. **Nanodiamond-adsorbate interactions studied by DFT.** (Poster presentation), *57th Symposium of Theoretical Chemistry*, Online, 20-24 September 2021.

Elizabeth Robertson won the **best poster award** for the following contribution:

- E. Robertson, L. Jaruingue, L. Messner, L. Esguerra, G. Gallego, K. Lüdge, J. Wolters. **A Scheme for Optical Reservoir Computers with Atomic Memory.** (Poster presentation), 751. *WE-Heraeus-Seminar / Optical Information Processing - from Quantum Computing to Artificial Intelligence*, 25-27 August 2021.

HEIBRIDS on the News

The work of **Binayak Ghosh** on automatic detection of volcanic unrest has been covered by various news outlets:

<https://scienmag.com/volcano-analysis-in-real-time/>, <https://www.maz-online.de/Brandenburg/Wie-Potsdamer-Geoforscher-die-Beobachtung-von-Vulkanen-verbessern> (restricted access) and <https://www.innovations-report.de/fachgebiete/geowissenschaften/vulkananalyse-in-echtzeit/>

H³, Helmholtz Herbst Hackathon

HEIBRiDS students **Tabea Rettelbach**, **Christian Utama**, and **Brian Groenke** attended the first [H³, Helmholtz Herbst Hackathon](#), which brought together for four days MSc students, doctoral researchers, and postdocs from Helmholtz and elsewhere to apply their skills in solving real-world scientific challenges with AI/ML. The event featured several keynote talks by prominent researchers in the field of scientific machine learning. Team HEIBRiDS participated in a challenge involving image-based analysis of simulated plant root systems, and in cooperation with another team, was able to achieve excellent results on the given task.



Photo: Ramona Kloß

Announcements / Upcoming Events

Training offers from our partners

- Training offers from the **Humboldt Graduate School** and the **Dahlem Research School** can be found [here](#) and [here](#). For registration, please follow the registration link for each individual workshop.
- Training offers from **HIDA**, our sister-schools **HIDSS** and **HIFIS** can be found [here](#) and [here](#).
- The Lecture Series of our partner [FONDA](#) is taking place every **Tuesday from 14:00 to 15:00**. You can find the schedule [here](#).

Helmholtz Transferable Skills Courses

The Helmholtz Transferable Skills Courses are conducted in collaboration with trainers from Imperial College London, University of Surrey, and Helmholtz tutors. **Course II: Leadership Skills in Research Course** (2nd year students), will take place online on **November 9-11, 2021**. Contact [Eirini](#) for registration.

HIDA Virtual Annual Conference – NOV 30, 2021

The [HIDA Annual Conference 2021](#) is the opportunity for Helmholtz Scientists, in particular **doctoral and postdoctoral researchers in information and data science**, to connect with researchers throughout the institutions via networking events and workshops and to

discuss data science projects and methods. The event will take place online and you can register [here](#).

CHIRP – the podcast for change makers

[CHIRP](#) is a podcast created by four women working in tech and AI, who believe in inclusive technology. With this podcast they aim to connect with other women working in tech and AI, show their perspectives, share their stories and break down the barriers they face. The first episode has the title: **Overcoming bro culture as a woman in data science**.

(In)Credible Research is back!

This interdisciplinary online conference is organized by Charité and the Berlin Institute of Health (BIH) as part of the Graduate Studies Support of the Berlin University Alliance. It centers on the topic of good science and will enter its second round on **October 7-8, 2021**. Under this year's motto "**Science and Communication**", numerous lectures, discussions and interactive workshops will take place on topics such as science and communication, mental health, science in social media, reproducibility and more. The program will be complemented by interactive networking opportunities, a pub quiz, music by local bands, and more. PhD students and PostDocs from all disciplines are invited to attend. For more information and registration see [here](#).