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www.fz-juelich.de/jcns/JCNS-Workshop2022

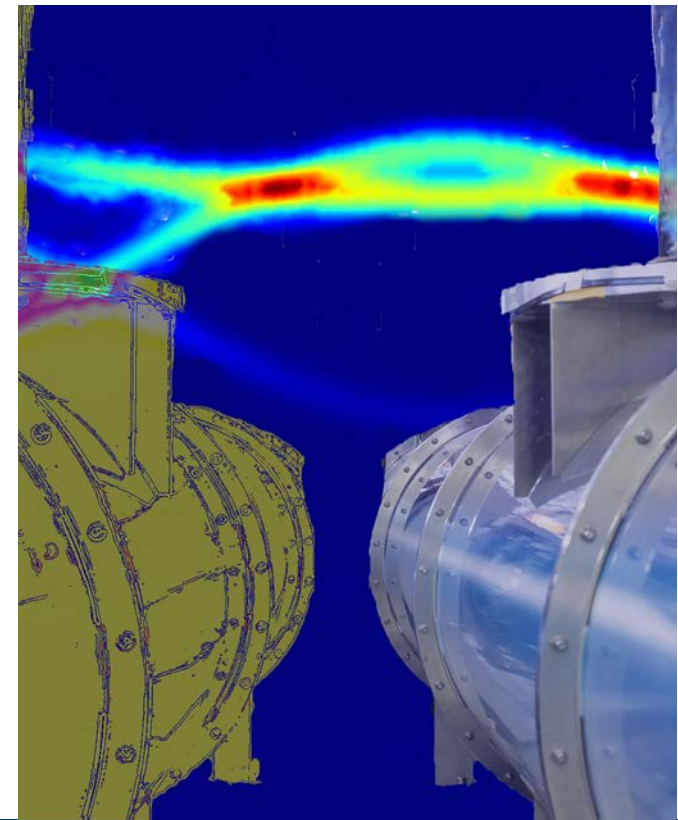
LOCATION AND ACCOMMODATION

Conference center of the Evangelische Akademie Tutzing at lake Starnberg in the area south of Munich.
<http://www.ev-akademie-tutzing.de/en/>
<http://www.tutzing.de>

Attendees will be accommodated on-site at the Conference Center in Tutzing. Single rooms are available. If the number of attendees may exceed the available number of rooms, equivalent accommodation in nearby hotels in Tutzing will be organized.

CONTACT

Forschungszentrum Jülich GmbH
Jülich Centre for Neutron Science, Outstation at MLZ
Organizing Committee JCNS Workshop
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JCNS WORKSHOP 2022

TRENDS AND PERSPECTIVES
IN NEUTRON SCATTERING:
EXPERIMENTS AND DATA
ANALYSIS IN THE DIGITAL AGE

October 11th - October 14th, 2022 | Tutzing, Germany



PICTURE COVER: Digital SANS

Mitglied der Helmholtz-Gemeinschaft

JCNS WORKSHOP 2022

The digitalization has influenced the fields of neutron as well as of other scattering techniques in recent years. The application of artificial intelligence and the increasing automation of the experiments has contributed to a better use of the beam time and data, it has speeded up the data reduction, facilitated and improved the data analysis. Digital twins have also attracted much attention in neutron scattering, providing insights that can be used to better prepare experiments and train users and students. Moreover, the move from steady source to time-of-flight instrumentation as well as the passage from one- to two-dimensional detectors has triggered need for advanced and multi-dimensional data treatment. An additional challenge is to make data and software "FAIR" and sustainable.

The workshop is devoted to the area of quantum materials in all their forms.

TOPICS WILL INCLUDE

- **Sustainable software development**
- **Analysis on the fly**
- **Inverse problems**
- **Experiments in the digital age**
- **Autonomous experiments and robotics**
- **AI assisted methods**
- **Data management**
- **Data reduction and analysis**

The workshop wants to be a forum of software experts and neutron users to discuss the challenges and the opportunities of the digital transformation in neutron and related scattering techniques.

The workshop will discuss current requirements and developments in such techniques. In particular the workshop is devoted to novel and upcoming experimental opportunities to discuss the scientific options and capabilities.

The workshop will include invited and contributed oral presentations and a poster session.

INVITED SPEAKERS

- **Mois Aroyo (Uni País Vasco)**
- **Jos Cooper (ISIS)**
- **Jeffrey Donatelli (Berkeley) t.b.c.**
- **Eva Herzig (Uni Bayreuth)**
- **Alexander Hexemer (Berkeley)**
- **Kuangdai Leng (ISIS)**
- **Paolo Mutti (ILL)**
- **Brian Richard Pauw (BAM)**
- **Mario Teixeira Parente (JCNS)**
- **Andrea Thorn (Uni Hamburg)**
- **Klemen Vodopivec (ORNL)**

CALL FOR PAPERS

Contributions dealing with the topics of the workshop to be presented as oral or poster presentation are requested. To present your work, please submit an abstract headed by title, name(s) and complete address(es) of the author(s) as Word-File via the conference web page.

www.fz-juelich.de/jcns/JCNS-Workshop2022

At the webpage a template can be downloaded. Please indicate the author who will present the paper.

DEADLINES

Opening of registration	April 4 th , 2022
Deadline for abstracts	July 8 th , 2022
Notification of acceptance	July 30 th , 2022
Registration deadline	September 1 st , 2022
Payment deadline	October 1 st , 2022

WE LOOK FORWARD TO WELCOMING YOU IN TUTZING!

We would like to advise you that during the event, photos could be taken that may later be used as public relations material (e.g. in press releases, on our homepage, in reports and advertising material). We may also allow others (e.g. funding and research organizations) to use the material for similar purposes. By registering for this event, you are giving your explicit consent to the publication of such material.

BEGINNING OF THE WORKSHOP

Monday, October 11th, 2022
10:00 h Registration is open
13:00 h Opening of the workshop

END OF THE WORKSHOP

Thursday, October 14th, 2022
12:00 h End of the scientific program
13:00 h End of the workshop

WORKSHOP FEE

Full fee (including onside lodging): 550 EUR (incl. VAT)
Students: 320 EUR (incl. VAT)

The workshop fee includes full lodging (3 nights) and board at the Evangelische Akademie Tutzing and the workshop dinner.

Workshop fee without accommodation:
320 EUR (incl. VAT).

No cash payments are accepted.

Detailed information on how to pay will be sent out along with the invoice once an oral or poster presentation has been accepted. The invoices contain the information provided in the registration form.

Applicants who indicated their intention to pay by credit card will receive an e-mail with their invoice which includes a link to all relevant payment instructions.



JCNS operates a suite of high performance neutron scattering instruments at the Heinz Maier-Leibnitz Zentrum (MLZ) in Garching near Munich.