8th Conference on Trapped Charged Particles and Fundamental Physics

TCP2022

GLASHÜTTEN (near Frankfurt), GERMANY 26.-30.09.2022

TCP-2022 Website: TCP2022

First Circular

The eighth international conference on Trapped Charged Particles and Fundamental Physics (TCP2022) will be held in Glashütten, Germany from September 26 to September 30, 2022. This flagship conference belongs to the series of conferences started in Lysekil (Sweden) in 1994, followed by conferences in Asilomar (USA, 1998), Wildbad Kreuth (Germany, 2002), Parksville on Vancouver Island (Canada, 2006), Saariselkä (Northern Finland, 2010), Takamatsu (Japan, 2014) and Traverse City, MI (USA, 2018). The conference in Glashütten will focus on recent developments and highlights in scientific fields using trapped charged particles with a particular emphasis on:

- Fundamental Interactions and Symmetries
- QED Effects
- Quantum State Manipulation and Quantum Information
- Precision Spectroscopy and Frequency Standards
- Highly Charged Ions in Traps
- Radioactive Isotopes in Traps
- Plasmas and Collective Behavior
- Storage Ring Physics
- Trapped Antimatter
- Applications of Charged Particle Trapping

Important Dates

Tentative dates for the organization of the meeting:

- \circ Second Circular Call for Abstract Contributions 15 February 2022
- \circ Early Registration opens 15 February 2022
- $\,\circ\,$ Deadline for Contributed Abstracts 30 April 2022
- o Author notification 31 May 2022
- \circ End of Early Registration 30 June 2022
- $\,\circ\,$ End of block reservation Hotel rooms 13 August 2022
- o Registration closes 15 August 2022

Conference Venue

The conference will take place at Collegium Glashütten, a conference center with spacious open areas inside and large garden and terraces providing room for the exchange of inspirational ideas in the idyllic green and hilly Taunus Mountains and only 35 km away from Frankfurt Airport.

Lodging and Travel

Rooms have been reserved at a special rate in the Hotel Collegium Glashütten, which is also the conference site. Further information about the room booking can be found on our website.

A shuttle from Frankfurt Airport can be booked via the hotel / conference website. Arrival by train is via Frankfurt/Main and then S4 direction Kronberg. From there, a short taxi ride to Glashütten remains (booking through hotel recommended).

Conference Program

TCP-2022 will have a five-day program. Registration and a welcome reception are planned for Sunday, September 25. Conference excursions are tentatively planned for Wednesday afternoon, September 28, and the conference dinner for Thursday, September 29.

International Advisory Committee

- Rainer Blatt, University of Innsbruck, Austria
- Georg Bollen, FRIB, MSU East Lasing, USA
- John Bollinger, NIST, Boulder, USA
- Dima Budker, Uni Mainz und HIM, Germany
- Jens Dilling, TRIUMF, Vancouver, Canada
- Anu Kankainen, University of Jyväskylä, Finland
- Martina Knoop, University Aix-Marseille, France
- Xinwen Ma, Institute of Modern Physics, Lanzhou, China
- Daniel Rodriguez, University of Granada, Spain
- Guy Ron, Racah Institute of Physics, Israel
- Guy Savard, Argonne National Lab, USA
- Yannis Semertzidis, Korea Adv. Institute of Science and Technology, South Korea
- Richard Thompson, Imperial College London, United Kingdom
- Stefan Ulmer, CERN, Switzerland and RIKEN, Japan
- Michiharu Wada, KEK, Japan
- Eberhard Widmann, S. Meyer Institute, Vienna, Austria
- Takayuki Yamaguchi, Saitama, Japan
- Yuhu Zhang, Institute of Modern Physics, Lanzhou, China

Local Organizers (MPIK, GSI, HIM)

- Klaus Blaum, Max Planck Institute for Nuclear Physics, Heidelberg, Germany
- Michael Block, GSI, Darmstadt, Germany, Helmholtz-Institut Mainz, Germany, University of Mainz
- Sergey Eliseev, Max Planck Institute for Nuclear Physics, Heidelberg, Germany
- Francesca Giacoppo, GSI, Darmstadt, Germany
- Miriam Jäger, Helmholtz-Institut Mainz, Germany
- Yuri Litvinov, GSI, Darmstadt, Germany
- Thomas Stöhlker, GSI, Darmstadt + Helmholtz-Institut Jena, Germany
- Gabi Weese, Max Planck Institute for Nuclear Physics, Heidelberg, Germany

Conference Chairs

- Klaus Blaum (MPIK) and
- Michael Block (GSI, HIM, JGU)

Contacts

Please address questions about the conference to:

TCP-2022 Secretaries Miriam Jäger and Gabi Weese

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