Terfel Conference 5-8 July 2022, Warsaw, Poland













Invitation

In the name of Program Committee we are delighted to invite you to participate in the *International conference on Free Electrons Laser Applications in Infrared and THz Studies of New States of Matter - TERFEL*, that will take place at *Warsaw from July 5 to July 8, 2022*, organized by National Centre for Nuclear Research jointly with Centera (IWC PAS), Military University (WAT) and THz experts from Warsaw University.

We will have great pleasure to host distinguished invited speakers (listed on the other side).

The aim of this conference is to bring together experts in the field of THz and IR science to present current and new investigations that utilize the unique and exceptional characteristics of Free Electron Laser-based IR/THz sources. The conference will cover many areas of IR/THz research includes the following topics:

- > Free electron laser facilities
- **▶** Photon beamline instrumentation & diagnostics
- Other high power THz/IR sources of radiation
- > THz and IR spectroscopy of condensed matter
- > THz and IR properties of biological materials
- Imaging in THz and IR ranges
- Ultrafast magnetic phenomena
- Correlated and low dimensional systems

We would be grateful if you could declare your participation/short abstract, completing the Registration Form available at our site: https://events.ncbj.gov.pl/event/75/.

Looking forward to your participation at TERFEL and to welcoming you in Warsaw.

Cordially,

Wojciech Knap (ScC Chair) and Paweł Krawczyk (PolFEL Project Leader)

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Scientific Committee	Invited Speakers
Wojciech Knap (Chair) Paweł Krawczyk	Giel Berden Contribution title: Infrared free electron lasers in (bio)analytical chemistry
Manfred Helm Gian Pierro Gallerano Sergey Ganichev	Aleksei Kimel Contribution title: Ultrafast (THz) magnetism: terra incognita beyond
Valusis Gintaras John Michael Klopf Jerzy Łusakowski	conventional approximations Martin Mittendorff Contribution title: Graphene plasmonics: THz nonlinearities beyond thermal effects
Katarzyna Nowakowska- Langier Jos Oomens	Fabio Novelli Contribution title: Nonlinear terahertz spectroscopy on liquid water
Milan Orlita Norbert Pałka Andrea Perucchi	Paola Di Pietro Contribution title: Nonlinear ultrafast studies at TeraFERMI beamline
Jarosław Poznański Agnieszka Siemion Joo-Hiuk Son	Stephan Winnerl Contribution title: Auger scattering in massless Dirac and Kane materials
Nikola Stojanovic Frederic Teppe Alessandro Tredicucci	Michael Gensch Contribution title:Superradiant Terahertz facilities for high field Terahertz Science – the first 2 decades
Adriana Wawrzyniak Przemysław Zagrajek	Tutorial Gian Piero Gallerano and Manfred Helm Contribution title: Free Electron Lasers: Past, Present and Future Challenges

Conference is planned in live-onsite mode with all sanitary requirements regarding COVID-19 EU regulations respected.

For further information, please contact terfel@ncbj.edu.pl