



Contribution ID: 1460 Contribution code: WEPG54

Type: **Poster Presentation**

## Electro-optical spectral decoding of THz pulses at MHz repetition rates

*Wednesday, 22 May 2024 16:00 (2 hours)*

A far-field electro-optical (EO) setup based on a balanced detection scheme has been set up to measure the coherent synchrotron radiation (CSR) at the Karlsruhe Research Accelerator (KARA). To enable the readout with a spectrally decoded scheme (EOSD), a KALYPSO based line array camera sensitive to NIR operating at a readout rate of 2.7 MHz has been included in the set-up. In this contribution, measurement results with the KALYPSO based spectrometer in combination with a commercial THz emitter are presented.

### Footnotes

### Funding Agency

M. M. P. was funded by BMBF contract number 05K22VKB. M. R. acknowledges the support by the DFG-funded Doctoral School "Karlsruhe School of Elementary and Astroparticle Physics: Science & Technology"

### Paper preparation format

LaTeX

### Region represented

Europe

**Primary author:** PATIL, Meghana (Karlsruhe Institute of Technology)

**Co-authors:** MUELLER, Anke-Susanne (Karlsruhe Institute of Technology); WIDMANN, Christina (Karlsruhe Institute of Technology); BRUENDERMANN, Erik (Karlsruhe Institute of Technology); NIEHUES, Gudrun (Karlsruhe Institute of Technology); STEINMANN, Johannes (Karlsruhe Institute of Technology); GRIMM, Leander (Karlsruhe Institute of Technology (KIT)); REISSIG, Micha (Karlsruhe Institute of Technology); CASELLE, Michele (Karlsruhe Institute of Technology); FUNKNER, Stefan (Karlsruhe Institute of Technology)

**Presenter:** REISSIG, Micha (Karlsruhe Institute of Technology)

**Session Classification:** Wednesday Poster Session

**Track Classification:** MC6: Beam Instrumentation, Controls, Feedback, and Operational Aspects: MC6.T03 Beam Diagnostics and Instrumentation