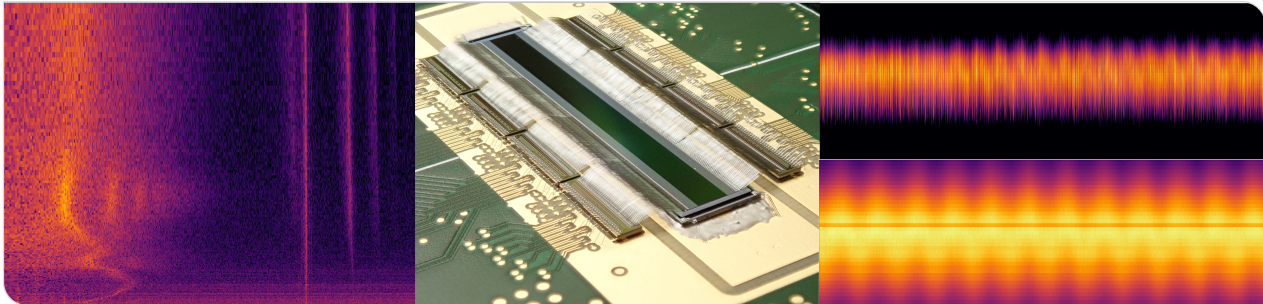


Electro-optical spectral decoding of THz pulses at MHz repetition rates

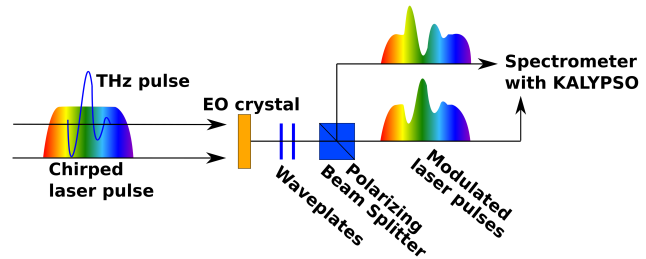
12th MT-ARD-ST3 meeting 2024

M. M. Patil, E. Bründermann, M. Caselle, S. Funkner, L. L. Grimm, G. Niehues, M. Reißig, J. L. Steinmann, C. Widmann,
& A.-S. Müller | 4. July 2024



EO Far-Field at KARA using balanced detection

- To perform single-shot turn-by-turn measurement of THz pulses at KARA using the ultra-fast line array detector KALYPSO
- To measure the complete temporal profile as well as the spectrum of the coherent synchrotron radiation (CSR)
- Enhancing the sensitivity of the EOSD experiment by implementing a balanced detection scheme

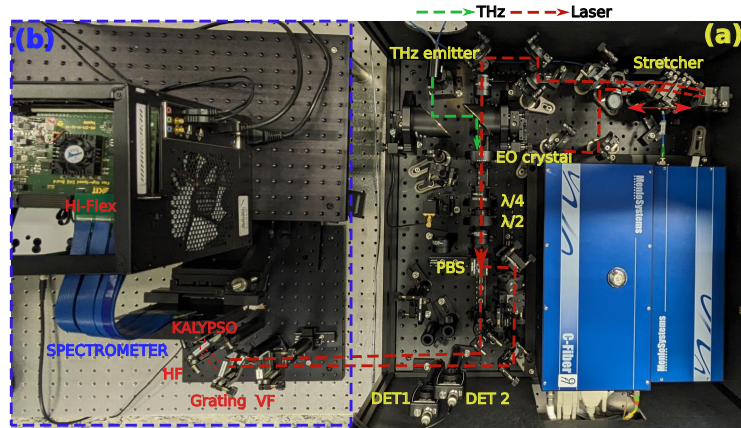


a

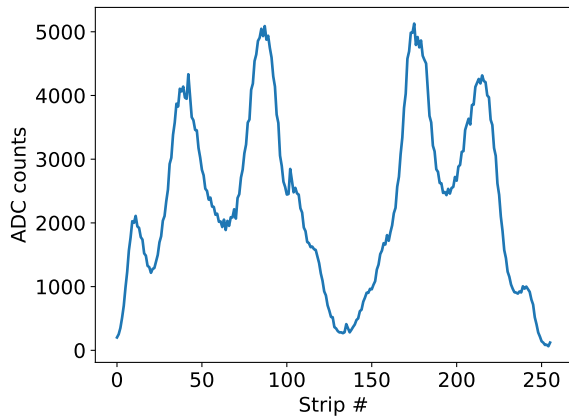
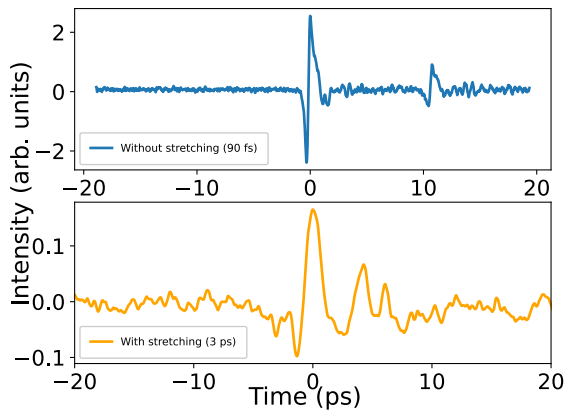
^aC. Widmann et.al., doi:10.18429/JACoW-IPAC2022-MOPOPT024

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EO Far-Field at KARA using balanced detection



¹M. Patil et al., doi:10.18429/JACoW-IPAC2024-WEPEG54

EO Far-Field at KARA using balanced detection

