EuroNNAc Special Topics Workshop

EUROPEAN NETWORK FOR NOVEL ACCELERATORS



Contribution ID: 151 Type: Invited talk

Coherent combination of fiber lasers towards drivers for future wakefield accelerators

Wednesday, 21 September 2022 09:20 (20 minutes)

The talk will summarize the current status of high peak power ytterbium- and thulium based fiber lasers (i.e. at $1\mu m$ and $2\mu m$ wavelength) based on coherent combination. In addition the nonlinear pulse compression to few-cycle pulses at mJ pulse energy level and high repetition rate (100kHz) as well as paths for temporal contrast enhancement will be presented. The discussion of the scaling potential towards Joule pulse energies will conclude the presentation.

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