

Abstract Submitted  
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**Injected wake field acceleration with a 40 MeV electron linac** S. KRAFT, A. JOCHMANN, C. ERLER, A. DEBUS, M. BUSSMANN, R. SAUER-BREY, U. SCHRAMM, T.E. COWAN, Forschungszentrum Dresden-Rossendorf — Over the last years multiple research groups achieved multi-MeV to GeV electron beams. Ultrashort bunches and a very low emittance combined with a high bunch charge offer a wide range of applications nevertheless the reproducibility of those beams is one of the main problems. External injection into a plasma wake is a promising concept to separate the influence of different input parameters from each other for more control of experimental results and to improve reproducibility. At the Research Center Dresden-Rossendorf the 150TW laser system DRACO was set up next to an superconducting electron accelerator. This will give the opportunity to study wake field acceleration in more detail. In this talk the present status of the experiment, ongoing upgrades and future plans will be described.

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