Status of the CLARA Facility at Daresbury Laboratory and exploitation for advanced acceleration research

Tuesday, 19 September 2023 19:00 (1h 30m)

The Compact Linear Accelerator for Research and Applications (CLARA) is an ultra-bright 250 MeV electron beam test facility under development at STFC Daresbury Laboratory. Originally conceived to test advanced Free Electron Laser schemes, CLARA has become a unique facility for user-led experiments in a wide range of disciplines, including advanced accelerator concepts.

Here we report on the status of the CLARA facility. A summary of our last user run (2021-2022) is presented, in which the CLARA 35 MeV front end was operated for R&D including plasma and dielectric acceleration. We provide an update on the construction of the facility, which is nearing completion and will enter technical systems commissioning in November 2023. Finally, prospects for future community exploitation of CLARA are discussed, focusing on capability and access. User exploitation of the CLARA facility is expected to begin early 2025.

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Session Classification: Poster session

Track Classification: WG1: Plasma-based accelerators and ancillary components