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## Towards femtosecond-scale electron bunches with high stability for accelerator R&D on the ARES linac at DESY

*Thursday 8 September 2022 14:40 (20 minutes)*

The ARES linac at DESY aims at producing and characterizing ultrashort (fs to sub-fs) electron bunches with high stability for cutting-edge applications related to accelerator R&D (e.g. Advanced and compact longitudinal diagnostics development, medical applications i.a. in collaboration with UKE, external injection into advanced accelerating structures, etc.). The current status and perspectives of the ARES linac in terms of beam properties and beamline completion will be presented. A special focus will be put on the bunch duration and stability measurements, which are the core goals of ARES. An overview on the already performed, ongoing and future experiments at ARES will also be given.

### Summary

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**Session Classification:** Session 3: Controls/Seeding/DAQ

**Track Classification:** Beam controls