

# 1.6 MW, 144 MHz solid state power amplifier for ELSA electron linac

*Thursday 29 August 2024 16:00 (2 hours)*

The 19 MeV electron linear accelerator ELSA at CEA DAM has been in operation for 30 years. A renovation of the RF system was necessary to improve the reliability of the linac. The second part of the renovation deals with the 144 MHz RF amplifier, supplying power to the photo-injector.

The former tetrode based amplifier has been replaced by a 1.6 MW Solid State Power Amplifier delivered by Ampegon company. One of the challenges was to design a compact amplifier to keep the same footprint.

This paper presents the amplifier, the tests and the commissioning.

## Footnotes

## Funding Agency

**Primary author:** CHAUCHAT, Anne-Sophie (Commissariat à l'Energie Atomique)

**Co-authors:** COLLET, Martin (Commissariat à l'Energie Atomique); LE FLANCHEC, Vincent (Commissariat à l'Energie Atomique); FRITSCHÉ, Bodo (Ampegon AG); LEUKERT, Michael (Ampegon Power Electronics AG)

**Presenter:** CHAUCHAT, Anne-Sophie (Commissariat à l'Energie Atomique)

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