

# Construction status of the IFMIF-DONES 5 MW linac

Monday 26 August 2024 16:00 (2 hours)

IFMIF-DONES (International Fusion Materials Irradiation Facility - DEMO-Oriented NEutron Source) is a facility under construction as part of the European fusion roadmap. The facility, located in Granada (Spain), is a powerful neutron irradiation facility for validation and qualification of materials to be used in fusion reactors. The construction of the facility under the framework of the DONES Programme started in March 2023, following the first DONES Steering Committee.

Currently, the design is being transferred to the DONES Programme, and the first bunch of in-kind contributions are being agreed, including the ones for the construction of the 5 MW deuteron superconducting linear accelerator. The design has been consolidated during the last years through the LIPAc (Linear IFMIF Prototype Accelerator), but also to other prototypes of critical parts of the accelerator among different frameworks. These include high-power solid-state amplifiers, superconducting cavities and beam diagnostics. Most of them are already validated, while a few are still undergoing validation.

In this contribution, the status of the design and manufacturing of the 5 MW linear accelerator will be reviewed, including the prototypes and validation activities being carried out under several projects.

## Footnotes

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