

Superconducting Radio-Frequency Recent Developments at IPN Orsay

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IPN Orsay is strongly involved in several R&D programs and projects based on SCRF cavities, which are the framework for many developments on superconducting cavity technology.

For the Spiral-2 project, IPNO is in charge of the high energy part of the Linac, composed of 14 quarter-wave SC cavities resonators. All series cavities have been tested and the first series cryomodule is currently being tested.

Within the EURISOL-DS EU program, spoke cavities have been developed for the intermediate energy part of the linac. The last prototype, a triple-spoke resonator has been designed and fabricated and is currently being prepared for chemical treatment.

Within the FP7 EUCARD program, two developments are performed:

- a 700 MHz, 5 cells, beta 0.65 elliptical cavity for the SPL has been designed and will be fabricated
- a new test cavity and associated test-stand has been developed in order to measure and characterize the fundamental properties of new superconducting thin films.

In this paper, we will report on the recent achievements on these ongoing SCRF activities.

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