

Interdisciplinary research at GANIL

Since the creation of GANIL, the use of swift heavy ions by communities other than nuclear physics has been considered. Thus the CIRIL laboratory was created to host interdisciplinary experiments. In 1989, the construction of the medium-energy line (SME) renewed the interdisciplinary research, by allowing the addition of about 3000 hours of beam time for material irradiation and collision physics to the 10% of high-energy beam time. Since then, the GANIL beamline possibility was greatly enriched first with the creation of a multi-charged low-energy ion line in 2000 (LIMBE, which has evolved since 2005 with the ARIBE installation having several beam lines), and then the IRRSUD line (2002) which takes advantage of the presence of two compact cyclotrons (the “free” cyclotron is used for interdisciplinary research. The ion energy of this beamline is exactly those of fission products and the lowest energy allows having high electronic stopping power but without activation of the samples, which makes easier the characterization after irradiation).

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