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Report on GANIL visit on 06/11-06/16/2011 (supported by FUSTIPEN GRANT)

The main aim of the visit was to discuss the future of the resonance scattering induced by radioactive beams and to specify the main problems of the theoretical analysis. During the visit a one-day workshop was organized by Dr. Francois De Oliveira. Ten speakers reported on different aspects of resonance reaction studies. There were mainly participants from France and Canada. I presented a talk: "Resonance scattering induced by rare beams (Status and Future)". As a result of the discussions changes were introduced in the plans to make measurements of the ¹⁸F(p,a)¹⁵O reaction (approved by Ganil PAC in 2012, beam time provided in November 2012; experiment E641S, the speaker B.Bastin) and in the plan to measure the ⁸He(p,p) reaction (speaker V. Goldberg, approved by the TRIUMF PAC, experiment S1264). As for the theoretical support, it was concluded that while the R-matrix theory is a good general basis for the analysis of the excitation functions, the original assumption on the hard-sphere interaction phase-shifts should be reconsidered to provide a description of the resonance scattering of exotic nuclei