

Status report of the FISIC experimental program

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With the FISIC project, we propose an experimental crossed-beam arrangement at SPIRAL2 facility to measure absolute cross-sections for fundamental atomic processes in the intermediate collision regime. In future, it is also planned to move the low-energy branch of the FISIC setup to CRYRING to perform experiments with heaviest ions. For the realization of such a challenging experimental project, many technical barriers have to be overcome. Among them are: the control and detection of the slow ion charge states, the purification system to prevent pollution from electron capture on the residual gas located just before the collision point in the low-energy beam line, the detection of high energy ions, the overlap between the two ion beams, the design of the collider chamber, the vacuum conditions, the stripping issue of intense ion beams. A status report on the different aspects of the FISIC program will be presented at the workshop.

Primary author: Dr KUMAR, Ajit (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France)

Co-authors: Dr MÉRY, Alain (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); GUMBERIDZE, Alexandre (GSI, Darmstadt); Dr BRÄUNING-DEMIAN, Angela (GSI, Darmstadt); Dr LEVY, Anna (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Mr HAHN, Christoph (Helmholtz Institute Jena); Dr PRIGENT, Christophe (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Prof. VERNHET, Dominique (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Prof. LAMOUR, Emily (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); WEBER, Günter (GSI, Darmstadt); BRÄUNING, Harald (GSI, Darmstadt); Mr RAMILLON, Jean-Marc (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); Prof. ROZET, Jean-Pierre (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Mr CHESNEL, Jean-Yves (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); Dr RANGAMA, Jimmy (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); Prof. ADOUI, Lamri (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); Dr TRASSINELLI, Martino (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Dr TAHIR, Naeem Ahmad (GSI, Darmstadt); Dr ROUSSEAU, Patrick (CIMAP,CEA/CNRS/ENSICAEN/Université de Caen Basse-Normandie); Dr GEITHNER, René (Helmholtz-Institut Jena); Mr MACÉ, Stéphane (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); Mr STEYDLI, Sébastien (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France); STÖHLKER, Thomas (GSI, Darmstadt); SPILLMANN, Uwe (GSI, Darmstadt)

Presenter: Dr KUMAR, Ajit (Institut des Nanosciences de Paris, Sorbonne Universités UPMC Paris 6, 75252 Paris Cedex 05, France)

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