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## Recent results of the latest EXL campaign

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EXL (EXotic nuclei studied in Light-ion induced reactions at storage rings) is a project within NUSTAR at FAIR. It aims for the investigation of light-ion induced direct reactions in inverse kinematics with radioactive ions in storage rings at the future FAIR facility. One of the key interests of EXL is the investigation of reactions at very low momentum transfers where, for example, the nuclear matter distribution, giant monopole resonances (GMR) or Gamow-Teller transitions can be studied. The existing ESR at GSI, together with its internal gas-jet target, provides the unique opportunity to perform this kind of experiments on a smaller scale already today. With a detector setup developed specifically for this experiment, we successfully investigated nuclear reactions with a stored radioactive beam for the very first time. As a part of the first EXL campaign we investigated the reaction  $^{56}\text{Ni}(p,p)^{56}\text{Ni}$  in order to measure the differential cross section for elastic proton scattering and deduce the nuclear matter distribution and the radius of  $^{56}\text{Ni}$ . Furthermore, as a feasibility study, we excited the GMR of  $^{58}\text{Ni}$  by utilizing the  $^{58}\text{Ni}(\alpha,\alpha')^{58}\text{Ni}$  reaction. This contribution will present the current status of the project and results of the campaign. This work was supported by BMBF (06DA9040I, 05P12RDFN8, 05P15RDFN1), the European Community FP7-Capacities, contract ENSAR n° 262010, HIC for FAIR, GSI-RUG/KVI collaboration agreement and TU Darmstadt-GSI cooperation contract.

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