

Perspectives and Opportunities for Stopped Beam Experiments in the first years of FAIR

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Synchrotron-driven exotic beam facilities provide unique advantages for experiments with stopped and thermalized beams. During the initial phase of FAIR, the Super-FRS will be operated with beams from the SIS18 synchrotron, already offering enhanced beam purity through an additional separation stage and improved transmission, particularly for fission and light fragments. The transition to the SIS100-driven First Science program will significantly increase beam intensities and energies, particularly for heavy-ion beams up to uranium. Together this will enable orders-of-magnitude higher secondary beam intensities. These advancements will open new possibilities for stopped beam experiments. This contribution will outline the timeline leading to First Science, the experimental opportunities and the technical boundaries conditions. Also the future beyond the first years will be discussed.

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