



**HELSINKI
INSTITUTE OF
PHYSICS**

Nuclear Matter program



“study of nuclear matter at the both extremes of the energy scale”



Nuclear Matter projects

- **ALICE**

- Project leader Ass. Prof. Sami Räsänen (JY)
- HIP annual funding 225 k€ (2026)
- 1.1.2026 - 31.12.2028
- Evaluation of the project Spring 2025

- **FAIR**

- Project leader Prof. Tuomas Grahn (JY)
- HIP annual funding 141,5 k€ (2026)
- 1.1.2026-31.12.2028
- Project evaluation Spring 2026

- **ISOLDE**

- Project leader Senior Res. Janne Pakarinen (JY)
- HIP annual funding 85 k€ (2026)
- 1.1.2024 - 31.12.2026
- Request for continuation 1.1.2027 – 31.12.29
- Project evaluation Spring 2023

- Physics analysis
- Detector hardware responsibilities
- In-kind deliveries
- Analysis of the first phase-0 experiments
- Strong position in Super-FRS collaboration, which is the first experiment to start
- Strengthen of Finnish participation in FAIR beyond nuclear physics community
- Research on nuclear structure and nuclear astrophysics.
- Project-based hardware contributions
- Finnish participation in ISOLDE upgrade

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CoE in Quark Matter at University of Jyväskylä (Research Council of Finland):

- Strong theory support for ALICE analysis
- Two experimental work packages in CoE
- Secured funding

The Accelerator Laboratory and the Department of Physics at University of Jyväskylä

- Complimentary experimental program (JYFL-ACCLAB, FAIR and ISOLDE)
- Scientists at JYFL participate actively in research at ISOLDE and FAIR.
- Theory support JYFL for low-energy nuclear physics.

Collaboration with HIP detector laboratory

- FAIR in-kind deliveries
- ALICE hardware responsibilities

