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Underground nuclear astrophysics at LUNA and the Bellotti Ion Beam Facility of the INFN-LNGS

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Deep underground nuclear astrophysics with the LUNA experiment at the Gran Sasso National Laboratory by now has a 30-year history and a long track record of measuring crucial reactions for various nucleosynthesis scenarios, from the Big Bang to p-p and CNO reactions to the production of the heavy elements in the s process.
With the recent installation of a 3.5 MV accelerator at the LNGS and the (upcoming) inauguration of the Bellotti Ion Beam Facility the stellar scenarios and astrophysically important nuclear reactions that can be investigated is expanding greatly.
I will give an overview of the LUNA results and present the program and the experimental capabilities at the new user facility.

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