Data for Nuclear Astrophysics at the Felsenkeller Laboratory and in ChETEC-INFRA

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Nuclear astrophysics is at the intersection of nuclear physics and astrophysics, united in the quest of understanding the chemical evolution of the Universe. ChETEC-INFRA is an EU-supported starting community of research infrastructures for nuclear astrophysics, and networks complementary types of such infrastructures: nuclear laboratories supply data on astrophysical reactions, HPC facilities perform stellar structure and nucleosynthesis calculations, and telescopes and mass spectrometers collect elemental and isotopic abundance data. At the HZDR Felsenkeller underground ion accelerator laboratory, nuclear reaction data is measured with a 5 MV tandem accelerator in a low-background environment thanks to the laboratory's rock overburden.

The interdisciplinary nature of research in nuclear astrophysics is based on a wide range of types of data. In my poster I will showcase examples of the role of data in nuclear astrophysics research, as well as datarelated efforts within the nuclear astrophysics community, including ChETEC-INFRA. Current considerations for nuclear data collected in experiments at the Felsenkeller laboratory will be presented.

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