

News From the ISOLTRAP Mass Spectrometer

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Recent technical developments and experimental results from the ISOLTRAP mass spectrometer at ISOLDE/CERN will be presented in this contribution. During CERN's Long Shutdown 2 (LS2), a large variety of technical upgrades and maintenance work have been performed. Most significantly, a new offline reference ion source has been built and commissioned, combining a surface ion source and a laser ablation ion source. First results from the commissioning work will be shown, along with ideas for high-precision Q-value measurements of laser-ablated long-lived isotopes. Furthermore, since the restart of CERN after LS2 in June 2021, ISOLTRAP has performed several experiments on exotic radioisotopes and aided target and ion source developments at ISOLDE. Preliminary results for measuring ground and isomeric states in the neutron deficient region around 100Sn using Multi-Reflection Time-of-Flight Mass Spectrometry will be given.

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