

Contribution ID: 45 Type: Submitted

New emission Mössbauer spectroscopy studies at ISOLDE in 2015

Friday, 4 December 2015 09:30 (15 minutes)

In 2015, several beams were for the "first" time utilized for emission Mössbauer spectroscopy (eMS) studies at ISOLDE with applications in solid state physics and biophysics.

These include laser ionized ^{119}In (2.1 min.) and ^{119}Ag (2.1 s) for ^{119}Sn eMS, $^{151}\text{Dy} \rightarrow ^{151}\text{Gd}$ (120 d) for ^{151}Eu eMS and ^{197}Hg (62 h) for ^{197}Au eMS.

I will present the newly utilized beams and the new type of physics that can be explored with them. Some highlights will be presented.

Primary author: GUNNLAUGSSON, Haraldur Pall (KU Leuven (BE))

 $\textbf{Co-authors:} \quad \text{ISOLDE COLLABORATION, . (CERN); } \quad \text{M\"{O}SSBAUER COLLABORATION AT ISOLDE/CERN, .}$

(CERN); MOLHOLT, Torben Esmann (CERN)

Presenter: GUNNLAUGSSON, Haraldur Pall (KU Leuven (BE))

Session Classification: Hyperfine Interactions & Beta Decay Studies