Contribution ID: **294** Type: **Poster**

Microcalorimetric high-resolution spectroscopy of muonic lithium

Tuesday, 18 October 2022 16:16 (1 minute)

Metallic magnetic microcalorimeters (MMCs) represent a promising detection method for broadband high-resolution x-ray spectroscopy. These systems are particularly suitable for the detection of low-energy x-rays, as found in the spectroscopy of low-Z muonic atoms. Such high-resolution spectra would enable precision measurements of charge radii of light nuclei and could thus provide important benchmarks for modern nuclear theory. In this context, plans are presented for the spectroscopy of muonic lithium using MMCs as part of an upcoming experiment at the Paul Scherrer Institute.

Primary authors: FLEISCHMANN, Andreas (Universität Heidelberg); KNECHT, Andreas (Paul Scherrer Institut); OHAYON, Ben (ETH Zurich); WAUTERS, Frederik (Johannes Gutenberg University Mainz); VON SCHOELER, Katharina (ETH Zurich); KIRCH, Klaus Stefan (PSI - Paul Scherrer Institut); PAUL, Nancy (Laboratoire Kastler Brossel); INDELICATO, Paul (Laboratoire Kastler Brossel, CNRS); POHL, Randolf (Max-Planck-Institut für Quantenoptik)

Presenter: VON SCHOELER, Katharina (ETH Zurich)

Session Classification: BBQ - Drinks & Posters