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## Collinear laser spectroscopy on neutron-rich Mn isotopes approaching $N = 40$

The region below  $^{68}\text{Ni}$  ( $Z = 28$ ,  $N = 40$ ) is characterized by a rapid shell structure evolution. In the neutron-rich Mn ( $Z = 25$ ) isotopes, this results in an interesting interplay between single-particle and collective behavior. The  $^{51,53-64}\text{Mn}$  ground states as well as the  $^{58,60,62}\text{Mn}$  isomeric states are studied via bunched beam collinear laser spectroscopy at ISOLDE. The measured hyperfine spectra allow for a model-independent extraction of the nuclear structure information. Firm spin assignments are made which is indispensable for constructing reliable level schemes in this mass region. In addition, the  $g$ -factors are determined so precisely that even small deviations from the trend can be observed. These deviations provide important information to understand the changing structure towards  $N = 40$ .

**Primary author:** HEYLEN, Hanne (KU Leuven (BE))

**Co-authors:** CHEAL, Bradley (University of Liverpool (GB)); BABCOCK, Carla (CERN); GEPPERT, Christopher (Gesellschaft fuer Schwerionen forschung mbH (GSI)); YORDANOV, Deyan (Max-Planck-Gesellschaft (DE)); NEYENS, Gerda (KU Leuven); MOORE, Iain (University of Jyväskylä); PAPUGA, Jasna (KU Leuven (BE)); BILLOWES, Jonathan (University of Manchester (GB)); KREIM, Kim (Max-Planck-Gesellschaft (DE)); BLAUM, Klaus (Max-Planck-Gesellschaft (DE)); BISSELL, Mark (KU Leuven (BE)); NEUGART, Rainer (Johannes-Gutenberg-Universitaet Mainz); GARCIA RUIZ, Ronald Fernando (KU Leuven (BE)); NOERTERSHAEUSER, Wilfried (TU Darmstadt); GINS, Wouter (KU Leuven)

**Presenter:** HEYLEN, Hanne (KU Leuven (BE))