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## Penning-trap mass measurements of neutron-rich cobalt isotopes at IGISOL

The JYFLTRAP double Penning trap mass spectrometer at the Ion Guide Isotope Separator On-Line (IGISOL) facility offers excellent possibilities for high-precision mass measurements of radioactive ions. Using the new phase imaging technique (PI-ICR), ground and isomeric states can be separated, enabling independent measurements of their binding energies.

Accurate mass measurements of ground and isomeric states of  $^{68-70}$ Co have been performed at JYFLTRAP. The masses were measured, either for the first time for the isomeric states of  $^{68}$ Co and  $^{70}$ Co or with greatly improved precision for the others. Furthermore, the ordering of the low-spin and high-spin states for  $^{68}$ Co and  $^{70}$ Co could also be established, allowing on one hand to remove ambiguities on the mass surface beyond N = 40, and on the other hand to demonstrate that the ground state in  $^{70}$ Co corresponds to an intruder configuration. The results of this experiment will be presented as well as their comparison with Large Scale Shell Model calculations.

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