Contribution ID: **104** Type: **not specified**

Quasi-rotational bands observed in very neutron-rich odd-odd ^{64,66}Mn isotopes at $N \sim 40$

Friday, 11 October 2019 11:10 (20 minutes)

Excited states in ^{64,66}Mn have been studied using in-beam γ-ray spectroscopy through knockout reactions from radioactive beams of ^{67,68}Fe, respectively. The level schemes for the two odd-odd Mn isotopes have been established, exhibiting characteristics of quasi-rotational bands. Based on the systematics of the level structures in the lighter odd-odd Mn isotopes, the spin-parity of the levels and a $\pi f_{7/2} \otimes \nu g_{9/2}$ configuration have been proposed for the quasi-rotational bands in ^{64,66}Mn, extending the quasi-rotational level structure to the most neutron-rich odd-odd Mn isotopes. The observed levels are compared with large-scale shell model calculations in the fpgd shell using the state-of-the-art LNPS effective interaction.

Abstract Type

Talk

Primary author: Dr DING, Bing (中国科学院近代物理研究所)

Presenter: Dr DING, Bing (中国科学院近代物理研究所)

Session Classification: S1: 核结构

Track Classification: 核结构