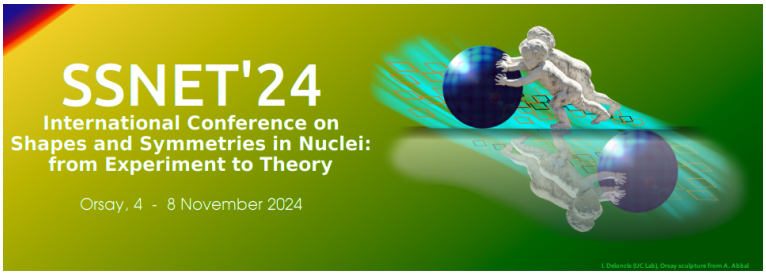

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Isomeric state properties in 165,169W

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The tungsten isotopes 165W and 169W have been studied by using fusion-evaporation reactions ^{92}Mo(^{78}Kr,4p1n)^{165}W and ^{92}Mo(^{84}Kr,1α2p1n)^{169}W at the Accelerator laboratory of the University of Jyväskylä, Finland. Beam energies of 380 and 402 MeV were used for the ^{165}W and ^{169}W experiments, respectively. The vacuum-mode separator MARA [1], the JUROGAM 3 germanium-detector array [2], and the MARA focal-plane detector setup [3] were utilised to select the reaction channels of interest and determine energies and half-lives for the previously unknown isomeric state properties. The structure above these $13/2^+$ isomers is relatively well known in both nuclei [4,5], allowing us to use the in-beam gamma rays in addition to mass and X-ray information to identify the isomeric transitions observed at the focal plane. The new results and systematics of isomerism in tungsten isotopes will be discussed.

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Author: JOUKAINEN, Henna (University of Jyväskylä, Finland)

Co-auteurs: Dr SARÉN, Jan (University of Jyväskylä); Dr UUSITALO, Juha (University of Jyväskylä); Dr RUOTSALAINEN, Panu (University of Jyväskylä)

Orateur: JOUKAINEN, Henna (University of Jyväskylä, Finland)

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