

Fast-Timing Measurements in $^{95,96}\text{Mo}$

S. Kisyov¹, S. Lalkovski¹, N. Mărginean², D. Bucurescu²,
L. Atanasova³, D. Balabanski³, Gh. Căta-Danil², I. Căta-Danil²,
D. Deleanu², P. Detistov³, D. Filipescu², D. Ghiță², T. Glodariu²,
D. Ivanova¹, R. Mărginean², C. Mihai², A. Negret², S. Pascu²,
T. Sava², L. Stroe², G. Suliman², N.V. Zamfir², M. Zhekova¹

¹Faculty of Physics, University of Sofia “St. Kliment Ohridski”, Sofia, Bulgaria

²National Institute for Physics and Nuclear Engineering “Horia Hulubei”,
Magurele, Romania

³Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of
Science, Sofia, Bulgaria

Fast-timing measurements were performed at NIPNE-Magurele, Romania. A set-up comprising eight $\text{LaBr}_3\text{:Ce}$ detectors and eight HPGe detectors, working in coincidence [1, 2], was used. Half-lives of excited states in $^{95,96}\text{Mo}$ were measured [3]. The structure of the states is discussed in the frame of particle-core coupling and high-j single-particle excitations.

References

- [1] N. Mărginean, D.L. Balabanski, D. Bucurescu, S. Lalkovski, L. Atanasova, G. Căta-Danil, I. Căta-Danil, J.M. Daugas, D. Deleanu, P. Detistov, G. Deyanova, D. Filipescu, G. Georgiev, D. Ghiță, K.A. Gladnishki, R. Lozeva, T. Glodariu, M. Ivașcu, S. Kisyov, C. Mihai, R. Mărginean, A. Negret, S. Pascu, D. Radulov, T. Sava, L. Stroe, G. Suliman, and N.V. Zamfir, In-beam Measurements of Sub-nanosecond Nuclear Lifetimes with a Mixed Array of HPGe and $\text{LaBr}_3\text{:Ce}$ Detectors, *Eur. Phys. J.* **A46** (2010) 329-336
- [2] S. Kisyov, S. Lalkovski, N. Mărginean, D. Bucurescu, L. Atanasova, D. L. Balabanski, Gh. Căta-Danil, I. Căta-Danil, J.-M. Daugas, D. Deleanu, P. Detistov, D. Filipescu, G. Georgiev, D. Ghiță, T. Glodariu, J. Jolie, D.S. Judson, R. Lozeva, R. Mărginean, C. Mihai, A. Negret, S. Pascu, D. Radulov, J.-M. Régis, M. Rudigier, T. Sava, L. Stroe, G. Suliman, N.V. Zamfir, K.O. Zell and M. Zhekova, In-beam Fast-timing Measurements in $^{103,105,107}\text{Cd}$, *Phys. Rev. C* **84** (2011) 014324
- [3] S. Kisyov, S. Lalkovski, N. Mărginean, D. Bucurescu, L. Atanasova, D. Balabanski, Gh. Căta-Danil, I. Căta-Danil, D. Deleanu, P. Detistov, D. Filipescu, D. Ghiță, T. Glodariu, R. Mărginean, C. Mihai, A. Negret, S. Pascu, T. Sava, L. Stroe, G. Suliman, N.V. Zamfir and M. Zhekova, Fast-timing Measurements in $^{95,96}\text{Mo}$, *J. Phys.: Conference Series*, in print