STRONG2020 (Second Strong2020 online Workshop)



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Probing Neutron Stars With Coherent $\pi 0 \pi 0$ Photoproduction

Wednesday, 15 September 2021 13:25 (5 minutes)

Matter at high densities is still a relatively unsolved mystery and significant work is being conducted in an attempt to gain some knowledge about it and the role played by the nuclear forces and QCD. This research is employing the use of the A2@MAMI facility to investigate the 6 quark configuration, aka. dibaryons, in a state of high density within the nucleus of Ca-40 and Ca-48. The poster is presenting the experimental procedure employed in obtaining the data using A2's Crystal Ball and TAPS setup, the current progress of the analysis, a brief background of the theory and link to Neutron Stars and the implications the results may have on current models of Neutron Stars.

Presenter: MOCANU, Mihai (University of York)

Session Classification: Poster Session