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## New $B(2+1 | E2 | 0+1)$ value in $^{20}\text{Ne}$ : mitigating an old challenge with rotor model

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The highly-efficient and segmented TIGRESS HPGe gamma; array at TRIUMF permits accurate Coulomb-excitation studies of the high-lying  $2+1$  states found in light nuclei with even number of protons and neutrons. A Coulomb-excitation measurement of  $^{20}\text{Ne}$  projectiles at safe energies has been carried out with the  $^{110}\text{Pd}(^{20}\text{Ne},^{20}\text{Ne})^{110}\text{Pd}$  reaction at 64.7 MeV. A larger reduced transition probability of  $B(E2; 2+1 \text{ to } 0+1) = 26:5$  plus or minus  $1:7$  W.u. has been determined in disagreement with the accepted value and mean-field calculations. This larger  $B(E2; 2+1 \text{ to } 0+1)$  mitigates, however, previous discrepancies with the rotational model of Bohr and Mottelson.

Apply to be considered for a student award (Yes / No)?

yes

Level for award (Hons, MSc, PhD, N/A)?

MSc,

Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Yes

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