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The first-excited 2+ state in 14C

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B(E2: $2+\rightarrow 0+$) values of neutron-rich even-even carbon isotopes have been reported up to 20C and do not only provide important information on the evolution of the underlying structural mechanism towards the drip line but also provide critical constraints for theoretical models. The B(E2: $2+\rightarrow 0+$) value in 14C can be indispensable to advance our understanding of the Carbon isotopic chain. However, the experimentally determined B(E2: $2+\rightarrow 0+$) value for 14C exhibits persistent inconsistencies with that obtained from theoretical models, including the no-core shell model. The attempted safe Coulomb excitation experiment of 14C at Florida State University took advantage of the unique beam capabilities and the availability of high-efficiency large volume LaBr3 detectors and the S3 double sided silicon strip detector. The preliminary results from the experiment to attempt the Coulomb excitation of 14C will be presented.

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