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**Halo-EFT analyses of knockout reactions of $^{11}$Be and $^{15}$C**[1] CHLOË HEBBORN, FRIB/LLNL, PIERRE CAPEL, Johannes Gutenberg-Universität Mainz — Knockout reactions are often used to probe the structure of nuclei in the neutron-rich sector [1,2]. Thanks to its weak binding, the valence neutron is easily knocked out of the nucleus. Moreover, the detection efficiency is high since in this process only the residual nucleus is measured after the collision. In a previous work, we have shown that knockout of one-neutron halo nuclei, such as 11Be and 15C, are sensitive mostly to the asymptotics of the initial state of the projectile [3]. Accordingly, reliable information about the tail of the bound-state wave function can be inferred from such observables. In this talk, I reanalyze the knockout data of Refs. [1,2] on 11Be and 15C using a Halo-EFT model of the projectile constrained with the ANCs predicted by ab initio calculations [4] and a Halo-EFT analysis of transfer data [5]. Our results are in excellent agreement with the experimental data, confirming the prediction of the ab initio calculations [4] and the analysis of transfer data [5]. [1] T. Aumann et al., Phys. Rev. Lett. 84, 35 (2000) [2] J. A. Tostevin et al., Phys. Rev. C 66, 024607 (2002) [3] C. Hebborn and P. Capel, Phys. Rev. C 100, 054607 (2019) [4] A. Calci et al., Phys. Rev. Lett. 117, 242501 (2016) [5] L. Moschini et al., Phys. Rev. C 100, 100, 044615 (2019)

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Chloë Hebborn
FRIB/LLNL

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