

Quasielastic Scattering Simulator off Mean Field Nucleons

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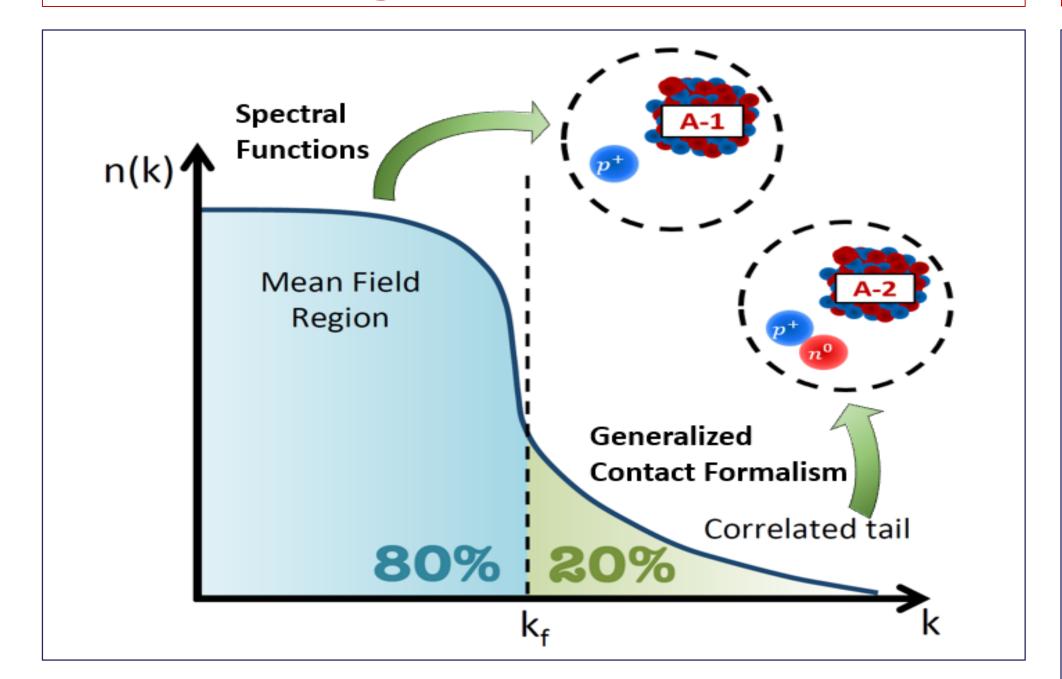


1. Massachusetts Institute of Technology

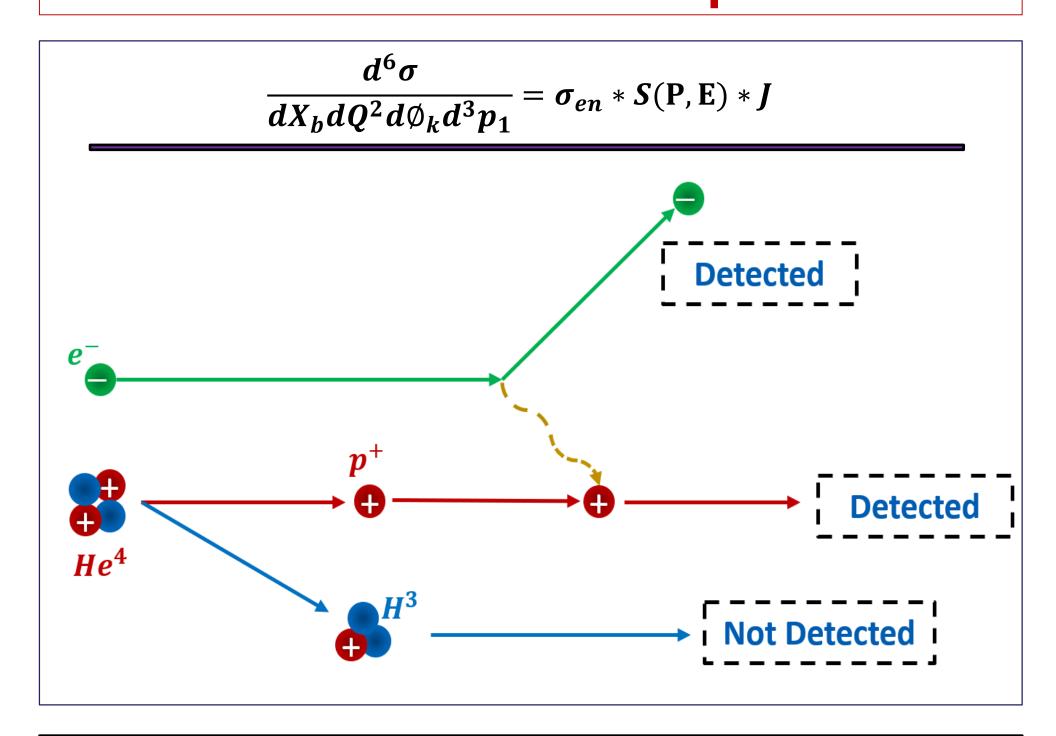
2. George Washington University

Outline of Project

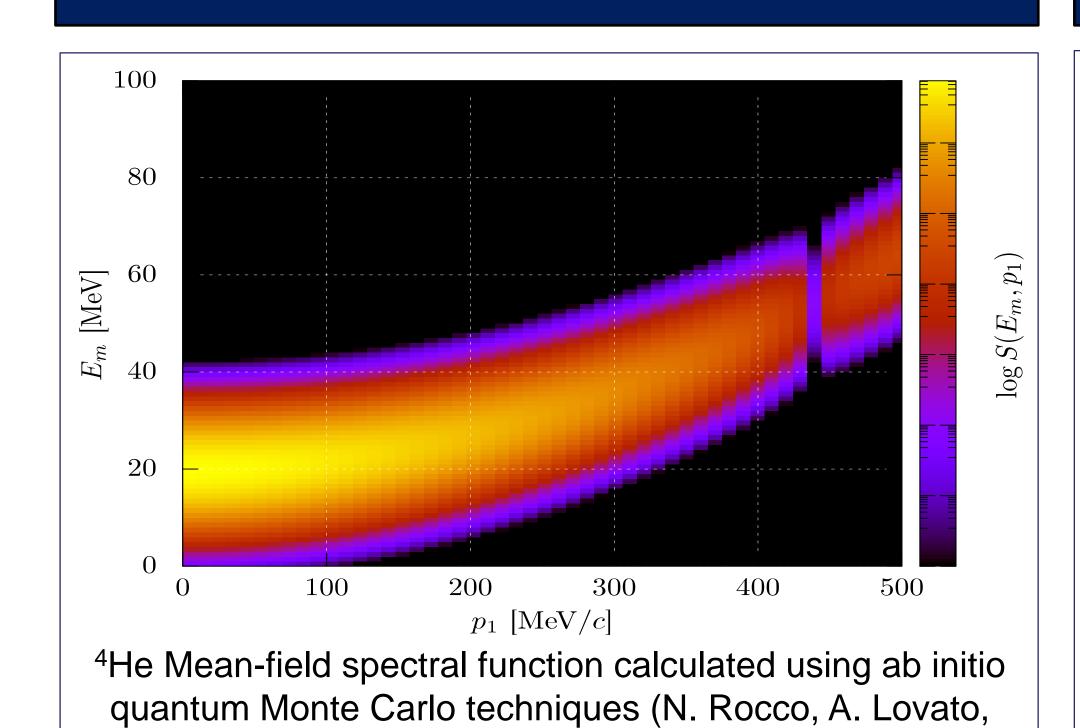
Background Motivation



Kinematic Setup



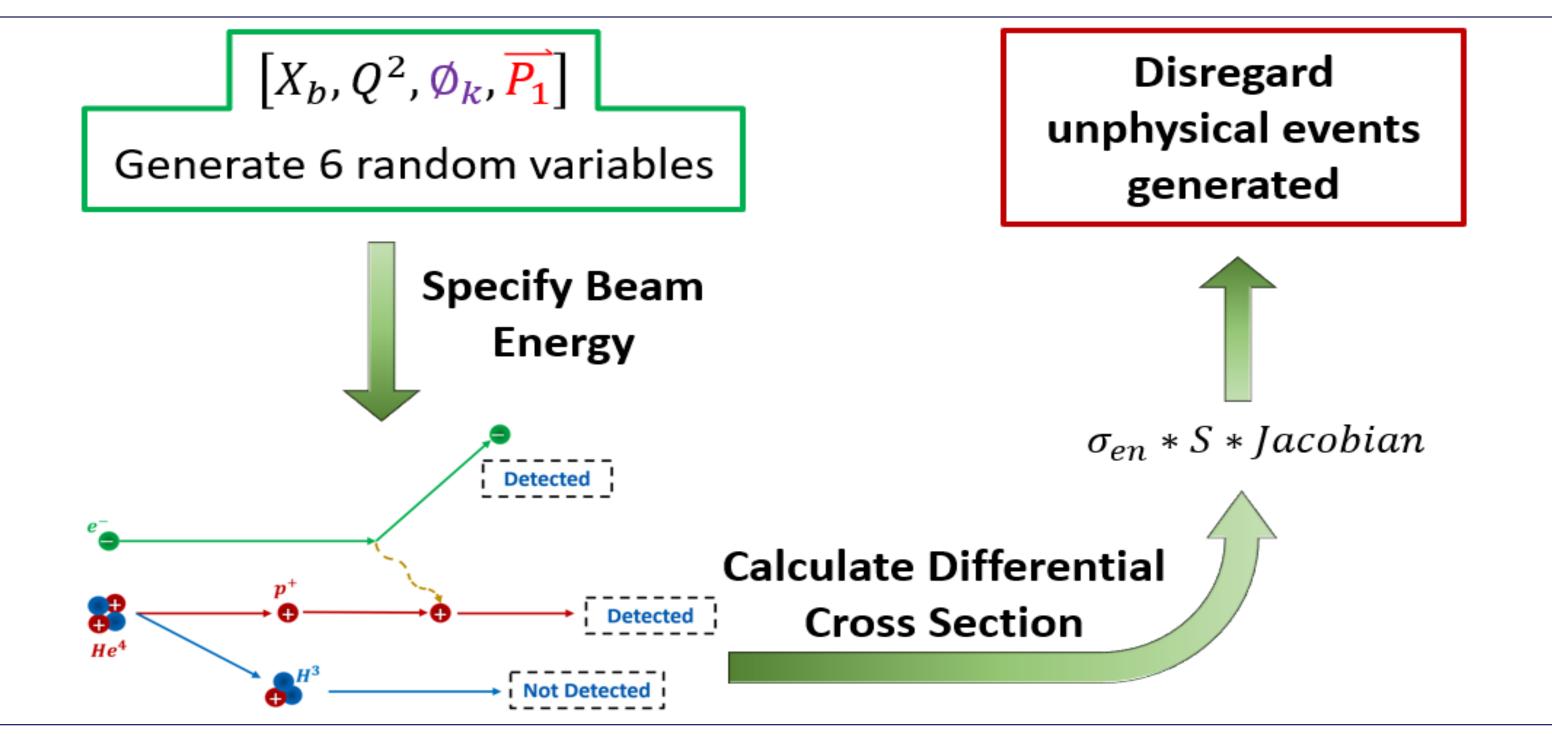
Ab Initio Spectral Function



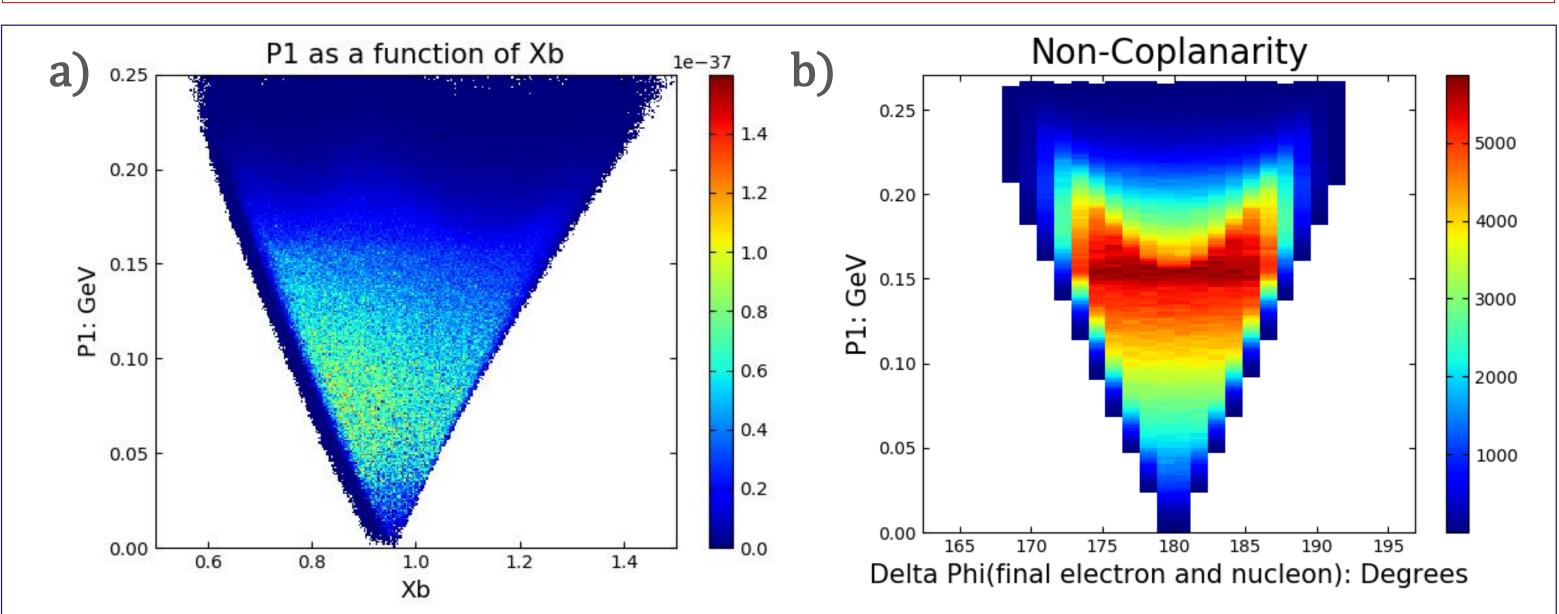
Argonne Theory Group)

Mean Field Event Generator

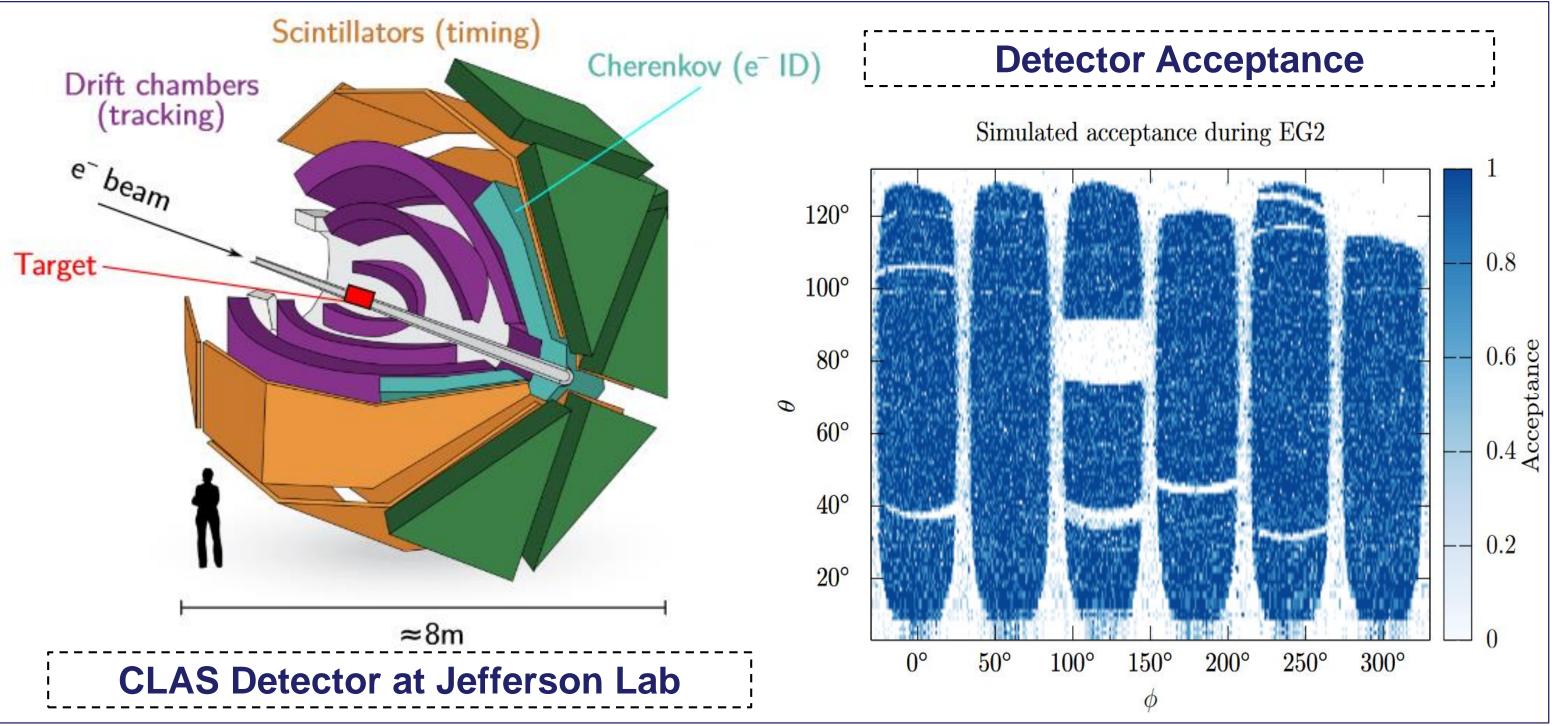
Algorithm



Validation of Generator

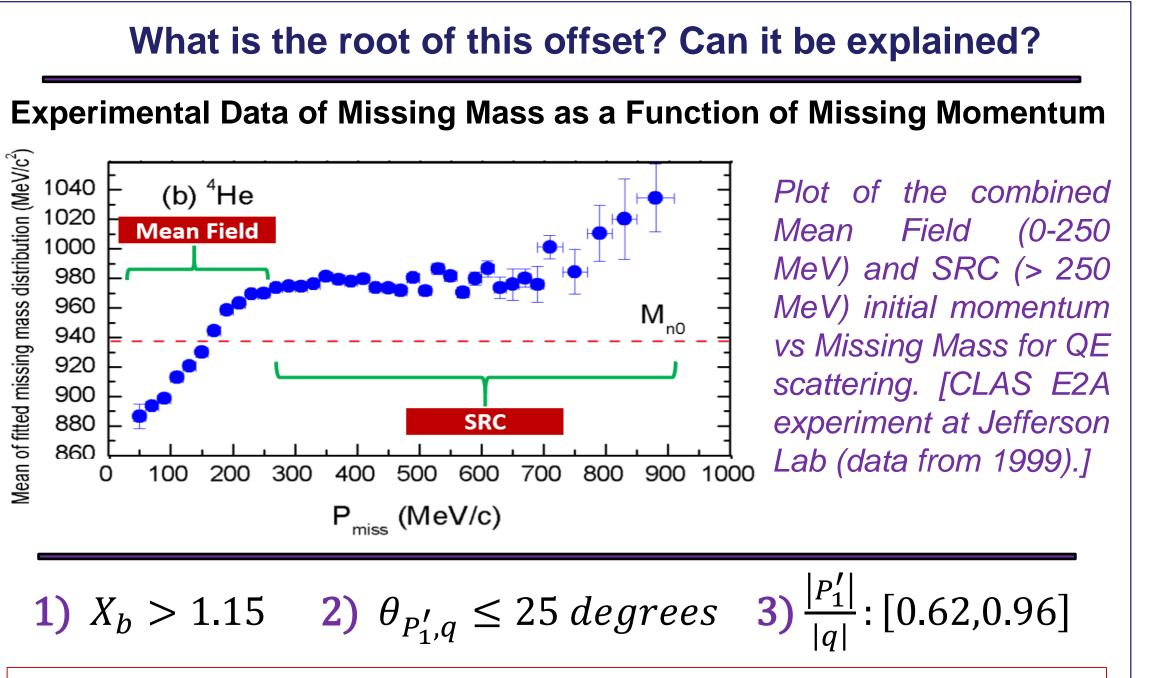


Modeling Experimental Data

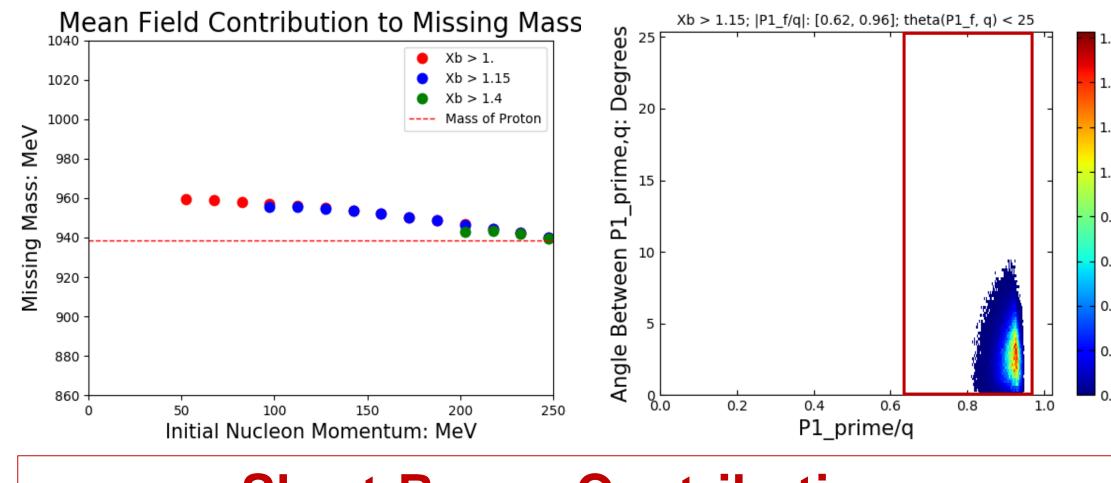


Application of Generator

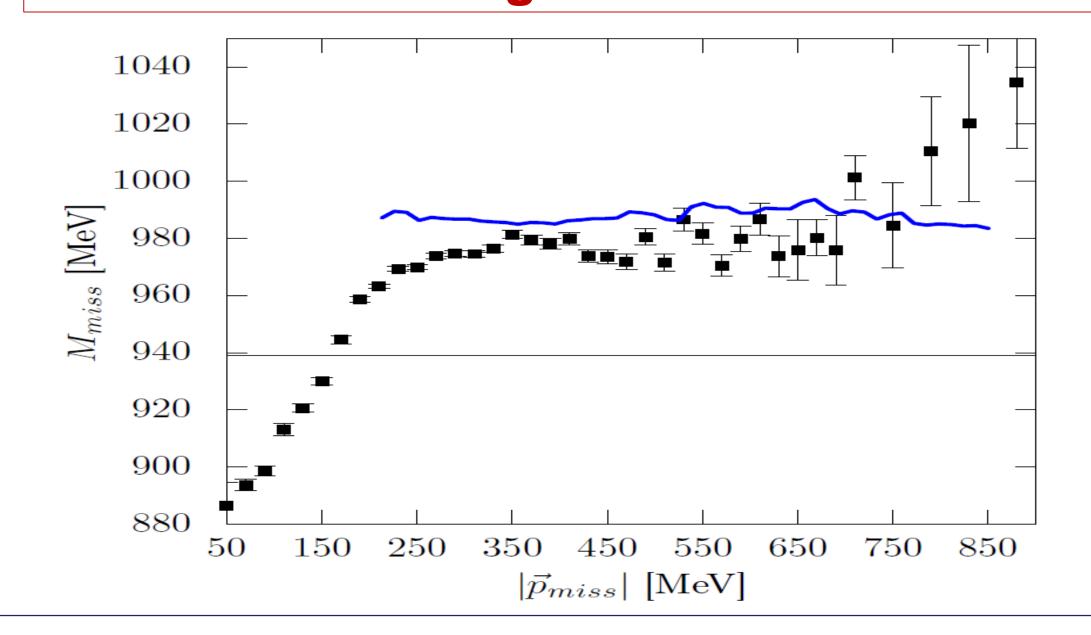
Missing Mass Offset in Pair Break-Up







Short-Range Contribution



Conclusion

A QE electron-nucleus scattering event generator was computationally modeled and validated. The generator confirms that the missing mass off-set observed in data has a *kinematic* origin.