

# Nuclear Lunch Questions

## *Bootstrapping the Deuteron*

2 November 2022

- 1) Has the bootstrap method been successfully applied to describing the electron in Hydrogen? **[Chirag Rathi]**
- 2) If this method over constrains non-linear equations and is also dependent on the constraints which is solved, would it be practical to use this method for non-linear equations at all? If yes, how and why? **[Shyam Chauhan]**
- 3) What is pion-less effective field theory in the deuteron? Are the nucleons treated as free particles? **[Sijan Regmi]**
- 4) Is bootstrapping better than QCD or other known methods of finding these eigenvalues in terms of computational power/ability? If so, when is it better? **[Nisha Singh]**
- 5) Go into more detail about “conformal fields.” What are they? What symmetries do they have? What do they preserve? **[Pramita Tiwari]**