Day 1 presentation discussion points from Bruce Barrett

- 1. To fully understand nuclei we first need to understand the NN and many-nucleon forces. If using Chiral EFT, we need to settle the power counting problem and also obtain renormalization group invariance.
- 2. We need to discuss the use of phenomenological NN and NNN interactions vs nucleon forces derived from first principles.
- 3. Benchmarking calculations of the various microscopic approaches for solving the many-nucleon problem should be performed, so as to gain a better understanding of how they explained nuclear data and how well they are or are not related.
- 4. We need new ways for extending successful few-nucleon approaches to medium and heavy mass nuclei.
- 5. We need to merge the mean field approaches with the microscopic methods.
- 6. More effort is needed regarding microscopic reaction theory.