Main conclusions and open questions from the discussion on: [by B. Bally and G. Giacalone]

“Are low-energy and high-energy measuring/calculating the same thing?”

- There is no reason (theoretical or experimental) to believe that the nuclei are not in the ground state when they collide. The Lorentz boost is a very local effect that affects short-range correlations and the nucleon structure.
- The strong and electromagnetic probes might not measure exactly the same thing. The nucleon form factors should be different.
- The sampling of nucleons should be performed from the point-nucleon density of the nuclei which can be provided by nuclear structure models. The one-body density of a deformed nucleus captures correlations that would otherwise require the implementation of higher-order correlation functions (possibly A-body), that are difficult to compute.
- The sampling of nucleons should be generalized to account for shape fluctuations. This means that the Woods-Saxon density used to sample the nucleons is not unique, but chosen from a distribution of such densities.
- Derek Teaney: nuclear deformation in the low-energy sense should leave fingerprints as well in the two-gluon or two-quark distributions of these nuclei. Can this effect be estimated in theory and probed in experiment?
- Dean Lee: we need a synthesis of how things are modeled and defined in high-energy collision models.