

# Systematics in nucleon matrix element calculations

*Friday, 27 July 2018 09:30 (30 minutes)*

The current status of calculations of simple nucleon structure observables, such as the axial charge, will be reviewed. Recent calculations have produced steadily better control over the standard sources of systematic uncertainty, and there are now multiple groups doing calculations with near-physical quark masses. A major challenge is the combination of an exponentially decaying signal-to-noise ratio and the need for large source-sink separations to eliminate excited-state contributions. There is a growing number of approaches for dealing with this problem, and an overview of them will be given.

**Primary author:** Dr GREEN, Jeremy (DESY, Zeuthen)

**Presenter:** Dr GREEN, Jeremy (DESY, Zeuthen)

**Session Classification:** Plenary

**Track Classification:** Hadron Structure