



# Quasielastic Scattering Working Group

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# Goals for the Group:

1. Standardize Standard Model parameters (couplings and masses) for study
2. Agree on the form factors to be used for the study
3. Perform detailed study to ensure that all generators agree for scattering on a free unbound proton in the QE region (for both electron and neutrino scattering)
4. Add in different nuclear initial state choices and handling and see impact of different reasonable physics choices
5. If time permits, extend beyond initial state choices to include things like RPA corrections, Coulomb effects, etc.

**The output of this group should be a controlled systematic study showing the uncertainty arising from different handling of initial state nuclear effects only for both electron and neutrino scattering**

# Members of the Group:

**Genie:** Steven G., Josh Barrow, Julia Tena Vidal

**NuWro:** Josh Isaacson

**NEUT:** Seisho Abe, Jake McKean, Lars Bathe-Peters

**Achilles:** Josh Isaacson

**GiBUU:** Steven G.

**Theory Only:** Guillermo Megias