# Approach to Three Nucleon Forces from Experiment

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Few nucleon scattering is an attractive candidate for a detailed investigation of 3NFs, such as their momentum, spin, and/or isospin dependence. In this system signatures of 3NFs can be extracted by direct comparison between experimental data and rigorous numerical Faddeev calculations based on nucleon–nucleon forces combined with or w/o 3NFs. The importance of 3NFs in few nucleon scattering was shown for the first time in nucleon–deuteron ($Nd$) elastic scattering for incident energies above 60 MeV/nucleon in the end of 1990's [1,2]. Since then experimental studies of proton–deuteron / neutron–deuteron elastic scattering as well as deuteron breakup reactions at $\sim$ 100 MeV/nucleon have been performed extensively at several facilities [3].

In the symposium, current status of investigation of 3NFs will be presented from the experimental point of view.

## References

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2. S. Nemoto *et al.*, Phys. Rev. C **58**, 2599 (1998).
3. See for example, K. Sekiguchi *it el.*, Phys. Rev. C **83** (2011); N. Kalantar-Nayestanaki *et al.* Rep. Prog. Phys. **75**, 016301 (2012); K. Sagara, Few Body Syst. **48** 59 (2010).