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## Nucleon spectroscopy on the lattice

*Monday, May 7, 2012 12:00 PM (30 minutes)*

We study positive and negative parity states of the nucleon, with particular interest in the parity reversal pattern of the Roper resonance. We investigate the isospin  $1/2$  channel of the pion-nucleon scattering on the lattice, including meson-nucleon interpolators. The distillation method makes the computation of disconnected diagrams affordable, while the variational method is used to extract the masses. Similar techniques can be exploited for other states of the QCD spectrum.

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