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3N potentials in the Faddeev coordinate space approach to Nd scattering

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Abstract. For studying 3N bound states and Nd scattering, the Tucson-Melbourne (TM) and Urbana 3N forces have been derived from the chiral EFT in the momentum representation. The Faddeev equations in configuration space have attractive properties when applied for nd and pd scattering above the two-body threshold. For that reason, we derived components of the TM 3N potential in the coordinate representation.

Keywords: nucleon-nucleon interactions, Faddeev equations, three-nucleon force

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