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## Instant form separable model for pion-nucleon system

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A separable Poincaré invariant instant form model for the pion-nucleon system has been constructed. It describes the coupling between single-baryon and meson-baryon channels. The elastic scattering amplitudes are obtained from three-dimensional Lippmann-Schwinger equations. The S-matrix elements for the various processes are gauge invariant and transform properly under inhomogeneous Lorentz transformations. The mass-operator interactions that describe the meson-baryon processes have been derived.

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