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Meson production in nucleon-nucleon collisions

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We study the production of mesons in nucleon-nucleon reactions at center-of-mass momenta of a few GeV using an $N_f = 2$ linear sigma model, extended by including the $N_f = 2$ multiplets of (pseudo-) scalar and (axial-) vector mesons and a doublet of the nucleon together with its chiral partner (the $N^*(1535)$ or $N^*(1650)$ resonance).

Cross sections for the production of π^- , η^- , ρ^- and ω^- -mesons will be presented. The results are compared to experimental data.

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