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## Combined analysis of $\pi N \rightarrow \pi N$ and $\pi N \rightarrow \pi \pi N$ in ChPT

Tuesday, 30 June 2015 15:00 (20 minutes)

In my talk, I will focus on the reactions  $\pi N \rightarrow \pi N$  and  $\pi N \rightarrow \pi \pi N$ , which are studied at one-loop level in the frameworks of covariant and heavy baryon chiral perturbation theory. Performing combined fits to determine the relevant low-energy constants, predictions are made for various observables. In addition, first attempts to include  $\Delta(1232)$  and R(1440) as explicit degrees of freedom will be discussed. (PhysRevC.89.065211)

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