

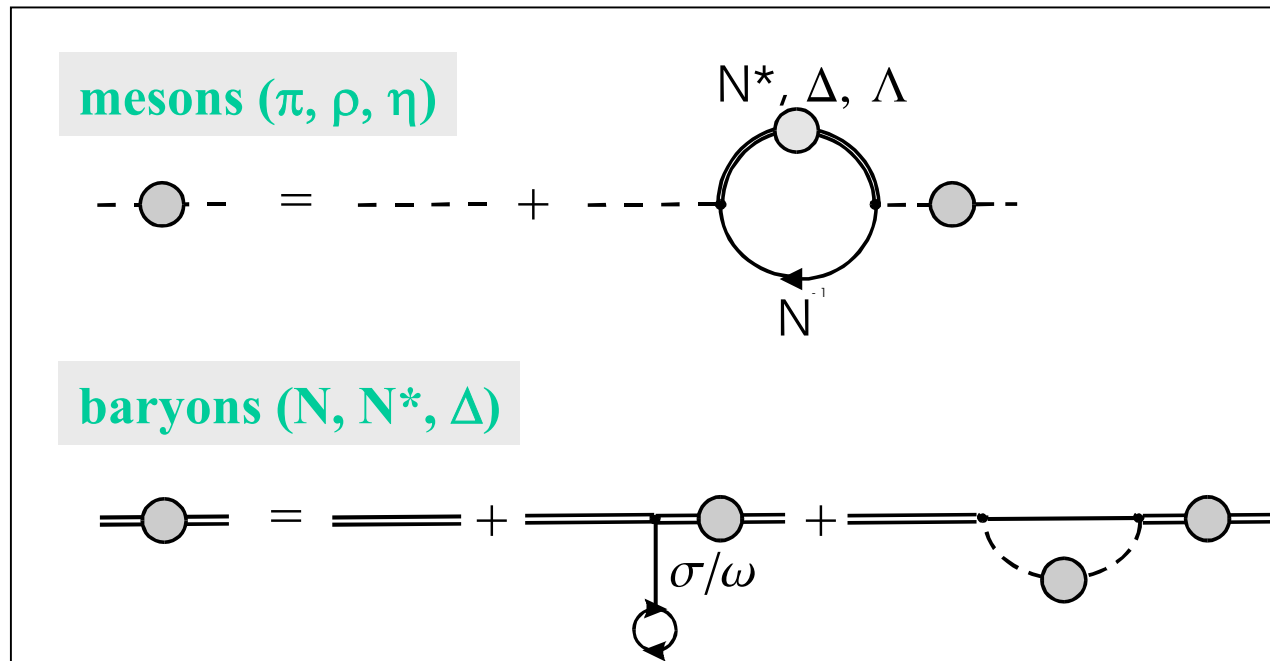
Coupled Channel Analysis of Mesons and Baryon Resonances in Nuclear Matter *(M. Post, S. Leupol and U. Mosel)*

meson sector: excitation of resonance-hole loops,
 most prominent: $\pi \leftrightarrow \Delta(1232)N^{-1}$, $\eta \leftrightarrow N(1535)N^{-1}$, $\rho \leftrightarrow N(1520)N^{-1}$

resonance sector: Pauli blocking, binding potentials,
 collisional broadening $RN \rightarrow NN$, $RN \rightarrow NR'$



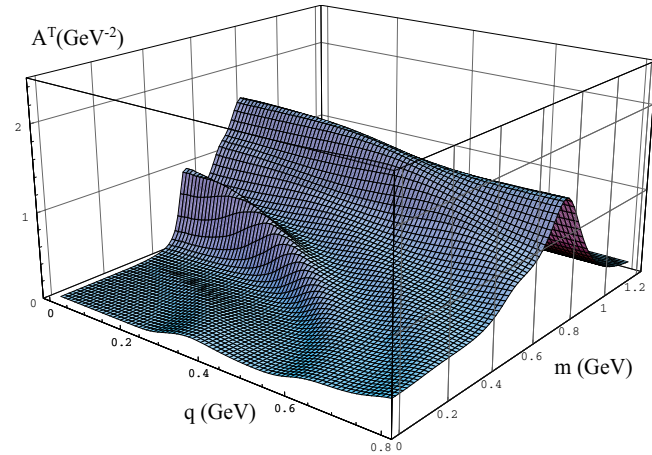
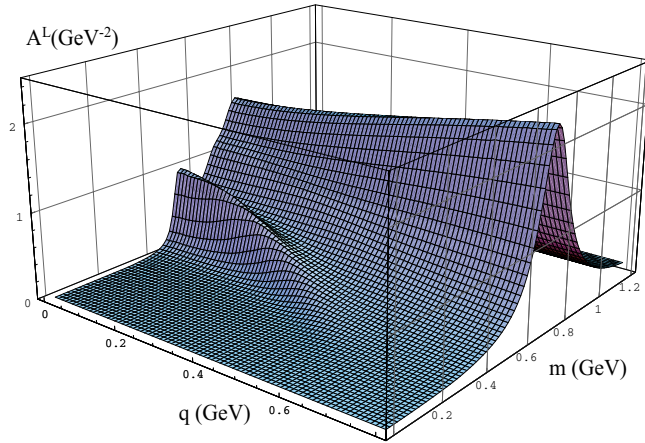
**self consistent set
of coupled equations**



Main Results:

reproduce in-medium Δ -width of 80 MeV

ρ : due to excitation of N(1520) more strength at low invariant masses (CERES)



N(1520): strong broadening as ρ becomes „lighter“ (Photoabsorption on Nuclei)

