

Skyrmions

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Skyrmions are topological solitons in a nonlinear effective field theory of pions, a low-energy version of QCD. The solitons have a topological charge - the baryon (atomic mass) number B - and the basic quantum states of the $B = 1$ Skyrmion model protons and neutrons. This talk will review Skyrmions with higher baryon numbers, and their ground and excited quantum states. These states are quite successful in describing several atomic nuclei, together with their rotational and vibrational excitations.