

Skyrmions in Composite Higgs Models

Skyrmions are topological solitons appearing in a variety of effective field theories. They describe for example nucleon states in the chiral theory of mesons. In many “composite” models of electroweak symmetry breaking where the Higgs is a pseudo-Goldstone boson, skyrmions are also present as stable objects living at the TeV scale or above. We will discuss the properties of these skyrmions and show that their relic density could naturally provide a solution to the dark matter problem.