

Physics of Hadrons

Degrees of Freedom

Energy (MeV)



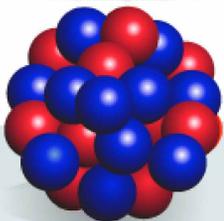
quarks, gluons



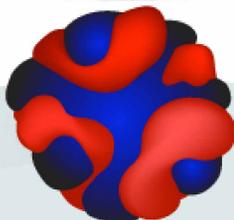
constituent quarks



baryons, mesons



protons, neutrons



nucleonic densities  
and currents



collective coordinates

940  
neutron mass

140  
pion mass

8  
proton separation  
energy in lead

1.32  
vibrational  
state in tin

0.043  
rotational  
state in uranium

Nucleonic matter

Physics of Nuclei