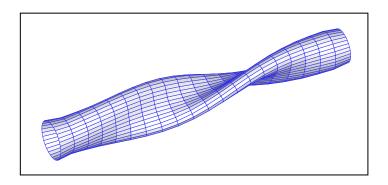
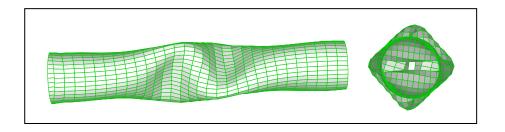
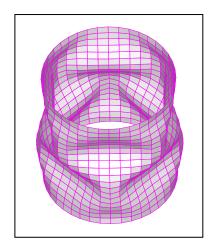
Nonlinear deformation simulation results of CNTs with Higher-Order Cauchy-Born Rule based constitutive model



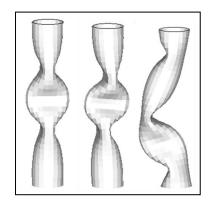
Torsion of a (7, 7) CNT

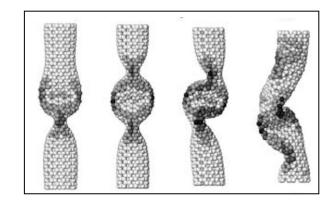


Torsion and compression of a (7, 7) CNT

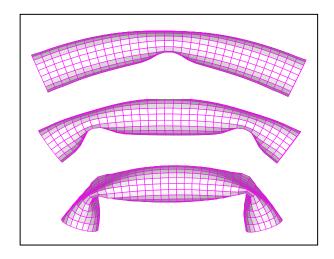


Compression of a (40, 40) CNT

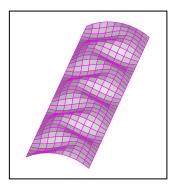




Compression of a (7, 7) CNT (Left) and the corresponding molecular dynamics simulation result by Yakobson et al. (Right, PRL, Vol.76, 1996, 2511-2514)



Bending deformation of a (7, 7) CNT with increasing bending angle



Buckling of a graphene sheet under Bi-axial compression