H_eff eigenstates at N=100, $arepsilon_2=$ 6.0

 $arepsilon_1=0.0,\ n=0,\ E=$ -36.4 $arepsilon_1=0.0,\ n=1,\ E=$ -36.4 $arepsilon_1=0.0,\ n=2,\ E=$ -14.5 $arepsilon_1=0.0,\ n=3,\ E=$ -14.4 $arepsilon_1=0.0,\ n=4,\ E=$ -0.3