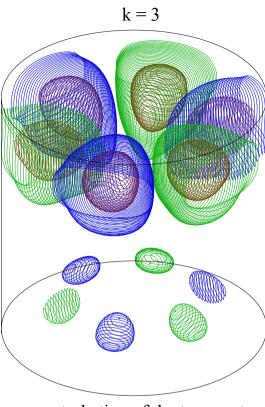


perturbation of  $\Psi_z$ 



perturbation of the temperature