

$$V_{\gamma_1, \varphi_-} [R_-] = \varphi (1/2 - \bar{p}_k \bar{x}_k); \quad V_{\gamma_2, \varphi_-} [R_-] = -\varphi^2 \bar{p}_k \bar{x}_k / 2;$$

$$V_{\gamma_3, \varphi_-} [R_-] := -\varphi^3 \bar{p}_k \bar{x}_k / 6$$