$$\psi_{i0}(|a_i|) + \frac{1}{2} \left(\frac{\delta^2 \psi_{io}}{\delta u_i^2} \right) \left\langle u_i^2 \right\rangle + \frac{1}{24} \left(\frac{\delta^4 \psi_{io}}{\delta u_i^4} \right) \left\langle u_i^4 \right\rangle$$