

Newly Defined Helicity



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Periodic Potential Field

- Under periodic side boundary condition, \mathbf{B} field can be separated into two parts, $\mathbf{B} = \mathbf{B}_0 + \mathbf{B}_c$.
- $(\mathbf{B} - \mathbf{B}_0) \cdot \hat{\mathbf{n}}|_{\text{side boundary}} \neq 0$, \mathbf{B}_0 can **NOT** be chosen as \mathbf{B}_R .
- \mathbf{B}_0 has a lower energy than \mathbf{B}_p .
 - As $\mathbf{B}_p = \mathbf{B}_0 + \mathbf{B}_{p1}$, the cross term in the energy calculation vanished by the boundary condition.