

$$-\frac{1}{T} - \sigma_{i^+, i^+} - \left( -1 + \frac{1}{T} + \sigma_{i^+, i^+} \right) \left( \frac{1}{T} + \sigma_{i^+, i^+} \right) + \left( \frac{1}{T} + \sigma_{i^+, i^+} \right)^2$$