

$$\leq \text{[diagram 1]} \text{[diagram 2]} : \quad \text{[diagram 3]} = \text{[diagram 4]}$$

$$\leq \frac{1}{\epsilon} \left(\sum_{i=1}^n \left| \langle \phi_i | \rho | \phi_i \rangle - \langle \phi_i | \sigma | \phi_i \rangle \right| + \sum_{i=1}^n \left| \langle \phi_i | \rho | \phi_i \rangle - \langle \phi_i | \sigma | \phi_i \rangle \right| \right)$$

$\leq \frac{H_1}{\sqrt{\pi}} + \frac{H_2}{\sqrt{\pi}} + \frac{H_3}{\sqrt{\pi}} + \frac{H_4}{\sqrt{\pi}} + \frac{H_5}{\sqrt{\pi}}$

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]