

[illegible]

$$\leq \frac{1}{\sqrt{\pi}} \left(\frac{1}{\sqrt{\pi}} + \frac{1}{\sqrt{\pi}} \right) = \frac{2}{\sqrt{\pi}}$$

$$\leq \frac{1}{n} \sum_{i=1}^n \left(\frac{1}{\lambda_i} + \frac{\lambda_i}{n} \right) = \frac{1}{n} \sum_{i=1}^n \frac{1+\lambda_i^2}{\lambda_i} = \frac{1}{n} \sum_{i=1}^n \frac{1}{\lambda_i} + \frac{1}{n} \sum_{i=1}^n \lambda_i$$

