

$$g(\lambda) \propto \lambda^{-1}$$

$$\mu = \frac{1}{\lambda} \quad \lambda = h(\mu) = \mu^{-1}$$

$$g_{\mu}(\mu) = g_{\lambda}\left(\frac{1}{\mu}\right) \cdot |h'(\mu)|$$

$$h'(\mu) = -\mu^{-2}$$

$$\rightarrow = \frac{1}{1/\mu} \cdot \left| -\frac{1}{\mu^2} \right| = \frac{1}{\mu}$$

$$\lambda e^{-\lambda x}$$

$$l(\lambda) = -\lambda x + \log(\lambda)$$

$$l(\mu) = -\frac{x}{\mu} - \log(\mu)$$

$$l'(\mu) = +\frac{x}{\mu^2} - \frac{1}{\mu}$$

$$\sigma_{\omega}(l'(\mu)) = \frac{1}{\mu^4} \cdot \frac{1}{\lambda^2} = \frac{1}{\mu^2}$$