

$$g(\theta+h) = g(\theta) + g'(\theta)h + o(h)$$

" "  
" $|h| \sim \psi(h)$ "

$$\frac{g(\theta+h) - g(\theta)}{h} \rightarrow g'(\theta)$$

" "

$$g'(\theta) + o(1)$$

$$g'(x) = -\frac{1}{x^2}$$

$$g'\left(\frac{1}{\lambda}\right) = -\frac{1}{\left(\frac{1}{\lambda}\right)^2} = -\lambda^2$$