

Hessian for various values of  $\alpha$ , line: analytical, dots: numerical

$$H(x) = 12 \cdot k1(x - a)^2 + 4 \cdot k1 \cdot b + 2 \cdot \alpha \cdot c \cdot [4 \cdot c \cdot (x - a)^2 - (x - a)] \cdot \exp(-c \cdot (x - 2)^2)$$

- $\alpha = 0.00$
- $\alpha = 0.40$
- $\alpha = 0.80$
- $\alpha = 1.20$
- $\alpha = 1.60$
- $\alpha = 2.00$
- $\alpha = 2.40$
- $\alpha = 2.80$
- $\alpha = 3.20$
- $\alpha = 3.60$
- $\alpha = 4.00$

