

$$h \in C^{(3)}(\mathbb{R}), u \in \mathbb{R}, x, z \in \mathbb{R}$$

$$h(u+x) - h(u+z) =$$

$$h'(u)(x-z) + \frac{1}{2} h''(u)(x^2 - z^2) + R_u(x, z)$$

$$|R_u(x, z)| \leq \frac{K}{3!} \delta^3 \cdot 1 \quad \begin{matrix} (x) \\ \{|x| \leq \delta\} \end{matrix}$$

$$+ K \cdot 1 \quad \begin{matrix} (x) \\ \{|x| > \delta\} \end{matrix} \cdot x^2$$

$$+ \frac{K}{3!} |z|^3$$

---

$$K = \max(\|h\|_\infty, \|h'\|_\infty, \|h''\|_\infty, \|h'''\|_\infty)$$

$$\delta > 0$$

$$\left[ \begin{array}{l} h(u+x) = h(u) + h'(u)x + \frac{1}{2!} h''(u)x^2 \dots \\ h(u+z) = h(u) + h'(u)z + \frac{1}{2!} h''(u)z^2 \dots \end{array} \right]$$