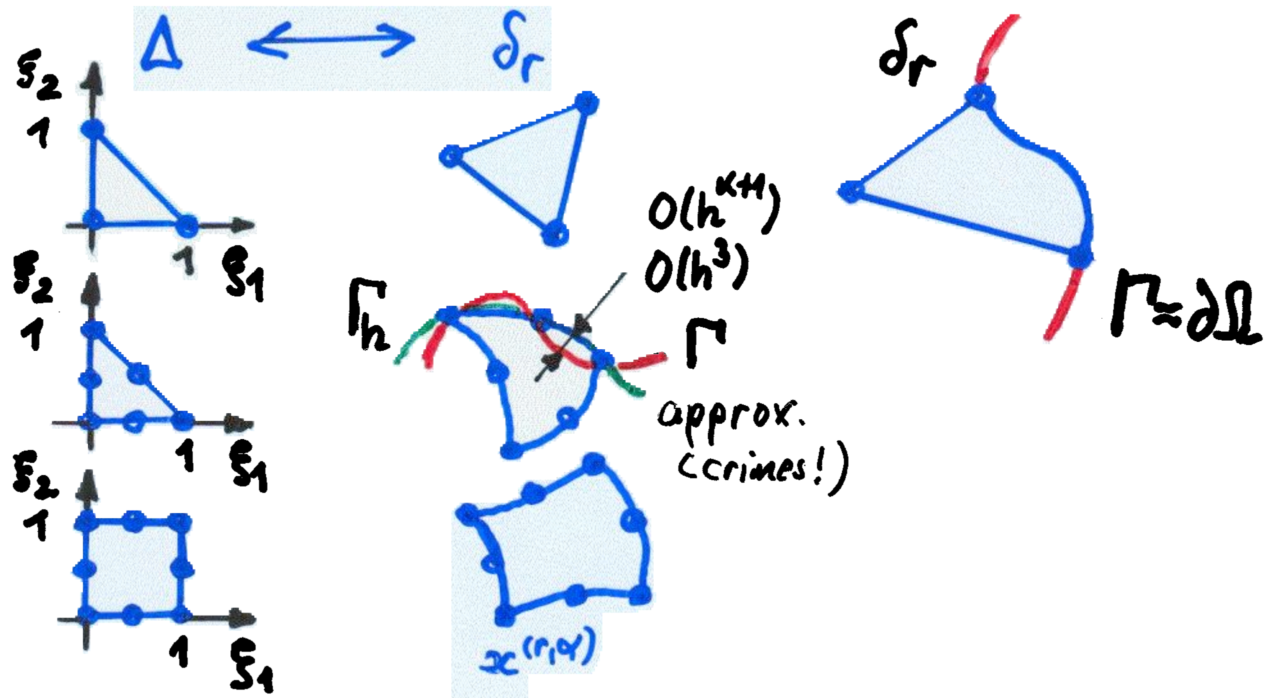
Remark 2.7:

1. If $x_{\delta_r}(\cdot) \in \mathcal{F}(\Delta) \supset P_K$ or $x_{\delta_r}(\cdot) \in C^{K+1}(\bar{\Delta})$



$$x_{\delta_r}(\xi) = \sum_{\alpha\in A} x^{(r,\alpha)}\, p^{(\alpha)}(\xi)$$

isoparametric map | **general non-lin. map**

$$(22)\quad \left|\frac{\partial^{|\beta|} x_{\delta_r,i}(\xi)}{\partial \xi^{\beta}}\right| \le \bar{c}_2\, h^{|\beta|} \quad \forall \beta : |\beta| \le K+1,$$

$$\forall \xi \in \bar{\Delta},\ \forall i = \overline{1,d}\ \ \forall r \in R_h\ \ \forall h \in \Theta,$$

then we have (cf. (21) proof step 4!):

$$(18')\quad \inf_{v_h \in V_h} |u - v_h|_{s,\Omega} \le a_{s,K+1}\, h^{K+1-s}\, \|u\|_{K+1,\Omega}$$

or

$$\inf_{v_h \in V_h} |u - v_h|_{s,\Omega} \le a_{s,K+1}\, h^{K+1-s} \Big(\sum_{r\in R_h} \|u\|^2_{K+1,\delta_r}\Big)^{1/2}$$