Differentialoperatoren in krummlinigen Koordinaten

	allgemein; $g_{ab} = \underline{b}_a \cdot \underline{b}_b$	orthogonal; $g_{ab} = \underline{b}_a \cdot \underline{b}_b = h_a^2 \delta_{ab}$
Gradient	$\operatorname{grad} f = \underline{b}^a \partial_{\xi^a} f$	$\operatorname{grad} f = \frac{1}{h_1} \partial_{\xi^1} f \; \hat{\underline{b}}^1 + \frac{1}{h_2} \partial_{\xi^2} f \; \hat{\underline{b}}^2 + \frac{1}{h_3} \partial_{\xi^3} f \; \hat{\underline{b}}^3$
Divergenz	$\operatorname{div} \underline{A} = \frac{1}{\sqrt{g}} \partial_{\xi^a} \left(\sqrt{g} A^a \right)$	$\operatorname{div} \underline{A} = \frac{1}{h_1 h_2 h_3} \left\{ \partial_{\xi^1} \left(h_2 h_3 \hat{A}^1 \right) + \partial_{\xi^2} \left(h_1 h_3 \hat{A}^2 \right) + \partial_{\xi^3} \left(h_1 h_2 \hat{A}^3 \right) \right\}$
Rotation	$\operatorname{rot} \underline{A} = \frac{1}{\sqrt{g}} \varepsilon^{abc} \underline{b}_a \partial_{\xi^b} A_c$	$(\operatorname{rot} \underline{A})_1 = \frac{1}{h_2 h_3} \left\{ \partial_{\xi^2} \left(h_3 \hat{A}_3 \right) - \partial_{\xi^3} \left(h_2 \hat{A}_2 \right) \right\}$ und zyklisch
Laplace	$\Delta f = \frac{1}{\sqrt{g}} \partial_{\xi^b} \left(\sqrt{g} g^{ab} \partial_{\xi^a} f \right)$	$\Delta f = \frac{1}{h_1 h_2 h_3} \left\{ \partial_{\xi^1} \left(\frac{h_2 h_3}{h_1} \partial_{\xi^1} f \right) + \partial_{\xi^2} \left(\frac{h_1 h_3}{h_2} \partial_{\xi^2} f \right) + \partial_{\xi^3} \left(\frac{h_1 h_2}{h_3} \partial_{\xi^3} f \right) \right\}$