ANALYTIC AND DIFFERENTIAL GEOMETRY 88-201

$$D_B(F) = F_{xx}F_y^2 - 2F_{xy}F_xF_y + F_{yy}F_x^2.$$

$$k_C = \frac{|D_B(F)|}{|\nabla F|^3}$$

$$\Gamma_{ij}^k = \frac{1}{2}\left(g_{i\ell,j} - g_{ij,\ell} + g_{j\ell,i}\right) g^{\ell k}$$

$$K = \frac{2}{g_{11}}\left(\Gamma_{1[1,2]}^2 + \Gamma_{1[1}^j \Gamma_{2]j}^2\right)$$