

$$a \left(\frac{z}{1+p^2} - \frac{t}{1+q^2} \right) = 0$$

$$P.L. a \left(\frac{z}{1+p^2} + \frac{t}{1+q^2} - \frac{2s}{pq} \right) = \frac{pq}{\sqrt{\dots}} + \frac{pq}{\sqrt{\dots}} - \frac{2(1+p^2)(1+q^2)}{pq\sqrt{\dots}}$$

$$= \frac{2\sqrt{1+p^2+q^2}}{pq\sqrt{\dots}}$$

$$a \left(\frac{1}{s_1} - \frac{1}{s_2} \right) = \frac{\sqrt{(1+p^2)(1+q^2)}}{(1+p^2+q^2)}$$

$$\frac{p}{\sqrt{\dots}} = \frac{\sin \eta}{\sqrt{1+p^2+q^2}} = \cos \eta$$

$$\frac{a}{s_1} = \frac{\sqrt{(1+p^2)(1+q^2)}}{1+p^2+q^2} = \frac{1}{(1+p^2+q^2) \cos \xi \cos \eta} \quad \frac{a}{s_1} = \cos \xi \cos \eta$$

$$\xi \pm \eta$$

$$\begin{cases} \xi + \eta = u \\ \xi - \eta = v \end{cases}$$

$$\cos \xi \cos \eta$$

L, M



$$L \quad pq(1+p^2)dx^2 + 2(1+p^2)(1+q^2)dxdy + pq(1+q^2)dy^2 = 0$$

$$dx = \frac{ad\xi}{\cos \xi}$$

$$\xi, \eta \quad (n, x) = \frac{\eta - \xi}{2}$$

$$\sqrt{1+p^2} dx \pm \sqrt{1+q^2} dy = 0$$

$$\begin{aligned} \text{Lenn} \text{Lenn} \xi \cos \xi d\xi^2 + 2 \cos \xi \cos \eta d\xi d\eta + \text{Lenn} \text{Lenn} \eta \cos \eta d\eta^2 = 0 \\ d\xi^2 + 2 \cos \xi \cos \eta d\xi d\eta + d\eta^2 = 0 \end{aligned}$$

$$\begin{cases} u = \cos \xi \\ v = \cos \eta \end{cases}$$

$$\begin{cases} u = \cos \xi \\ v = \cos \eta \end{cases}$$

$$\begin{aligned} L = \text{Lenn} \eta \\ M = \text{Lenn} \xi \\ dL = \cos \eta d\eta \\ dM = \cos \xi d\xi \end{aligned}$$

$$L = \text{Lenn} \xi$$

$$\xi \pm \eta = \text{const}$$

$$L M \frac{dM}{d\xi} + 2 dL dM$$

$$\text{Lenn} M \sqrt{1-p^2} \pm L \sqrt{1-m^2}$$

$$M^2 + L^2 - 2 L^2 M^2 \pm 2 L M \sqrt{1 - \dots}$$