

534. 卵形線 = ツイテ

松村 京治 (台北大)

(I) *Math. Z.* 41, p. 718 = 於ケル *Goetsch* の定理
 1 の相對微分幾何ヲハ $\frac{r'(\alpha)}{r(\alpha)} = \frac{h'(\varphi)}{h(\varphi)}$, 代リ =

$$(1) \quad \frac{\frac{h'(\varphi)}{h(\varphi)}}{\frac{H'(\varphi)}{H(\varphi)}} = \frac{\frac{r'(\alpha)}{r(\alpha)}}{\frac{R'(\alpha')}{R(\alpha')}} \left[= \frac{\tan(\alpha - \varphi)}{\tan(\alpha' - \varphi)} \right]$$

トナリテ矢張り成立スル H, R へ *Eicheilinie* = ゴクシ
 h, r へ考フル卵形線 = ゴクスル量デアル。

(II) 次 = 同論文定理 2 = 相當スルコトヲ 相對微分幾何ヲ
 考へ

$$\frac{h'(\varphi)}{h(\varphi)} = \frac{r'(\alpha)}{r(\alpha)} \frac{d\alpha}{d\varphi} = \frac{\sin(\alpha - \varphi)}{\cos(\alpha - \varphi)} \left(\frac{d\alpha}{d\varphi} - 1 \right),$$

$$\frac{H'(\varphi)}{H(\varphi)} = \frac{R'(\alpha')}{R(\alpha')} \frac{d\alpha'}{d\varphi} - \frac{\sin(\alpha' - \varphi)}{\cos(\alpha' - \varphi)} \left(\frac{d\alpha'}{d\varphi} - 1 \right)$$

ヲ辺々割算シ、次ニソノ右辺ノ分母ヲ $\frac{R'(\alpha')}{R(\alpha')}$ ヲ割リ(1)ヲ
代入セバ

$$\begin{aligned} (2) \quad \frac{\frac{h'(\varphi)}{h(\varphi)}}{\frac{H'(\varphi)}{H(\varphi)}} & \left[-\frac{d\alpha'}{d\varphi} + \frac{d\alpha}{d\varphi} + \frac{R(\alpha)}{R'(\alpha')} \frac{\sin(\alpha' - \varphi)}{\cos(\alpha' - \varphi)} \right] \\ & = \frac{R(\alpha)}{R'(\alpha')} \frac{\sin(\alpha - \varphi)}{\cos(\alpha - \varphi)} \left(\frac{d\alpha}{d\varphi} - 1 \right) \end{aligned}$$

ヲ得、(2)ハ吾人ノ結果デアリ。