

I. I. 1000 \*

$(\leq \lambda_0)$

$\rho \neq 1$

$[1, 4]$

$[1]$

$\rho = 0, 1$

$($

$I = \frac{1}{2} \int_{-1}^1 (1-x^2) dx = \frac{1}{2} \left[ x - \frac{x^3}{3} \right]_{-1}^1 = \frac{1}{2} \left( 1 - \frac{1}{3} - \left( -1 + \frac{1}{3} \right) \right) = \frac{1}{2} \left( \frac{2}{3} + \frac{2}{3} \right) = \frac{1}{2} \cdot \frac{4}{3} = \frac{2}{3}$

$[4, \dots]$





(1)

10  
01 0

(2)

III

$\rho < \rho$

$\rho > \rho$

$\rho > \rho$

0 01

[3] ( )













$$\mathcal{F}[\theta] = \frac{1}{\theta} \int_0^{\theta} \left[ (K_{11} - \theta + K) \theta + \frac{4\pi K}{\theta + K} \right] \frac{1}{\theta} \left[ \int_0^{\theta} \frac{1}{\theta + K} \right]^{-1} d\theta \quad (9)$$

... [4] ...  $\theta$  ...  $\theta = 0$  ...

$$\mathcal{F}[\theta] = \frac{1}{\theta} \left[ \frac{4\pi K}{\theta + K} \right] + \frac{1}{\theta} \int_0^{\theta} \left[ K - \theta \left( \frac{\Delta}{K} + \frac{4\pi K}{K} \right) \theta \right] + O(\theta^4) \quad (10)$$

...  $\rho$  ... I ...

$$\frac{4K}{K} \rho + \frac{\Delta}{K} \frac{1}{\pi} = 1 \quad (10)$$

... (10) ... III ... [40] ...  $\rho$  ... (10) ...  $\rho$  ...

$$\Delta\phi = \frac{\pi}{\rho} \int_0^{\rho} \frac{K}{K - \theta + K} \theta \quad (11)$$

$\rho$   $\Delta\phi$   $K/K \approx 0.4$   
 $0.4 * \pi\rho < \Delta\phi < \pi\rho,$  (1)

$\Delta\phi$   $\theta \approx 0$   
 $\theta \approx \pi/2$   
 $\rho$   $\Delta\phi$   $\rho$



I, ( )  
 [4].  
 0.  
 [1]  
 (1 4),  
 [ ]  
 (1 )

I, ( )  
 I, II  
 -0 1  
 -010 1,  
 (I )

---

[1]  $C$   $M$   $E$   $E$   $L$   
 [ ]  $($   $1$   $4)$ .

[ ] . . . . . x . . . . .