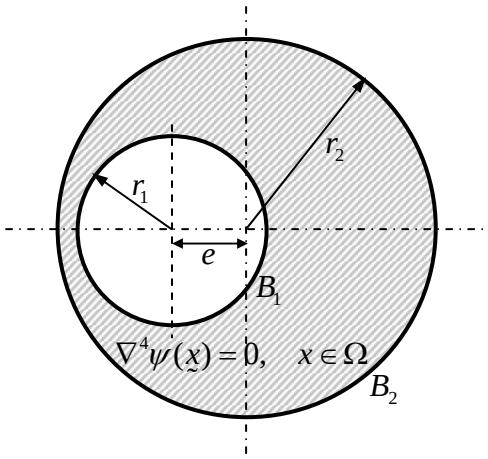
# Flow between Eccentric Rotating Cylinders (Case 2)




**Geometry Conditions:**

$r_1 = 0.5$

$r_2 = 1$

$e = 0.4$

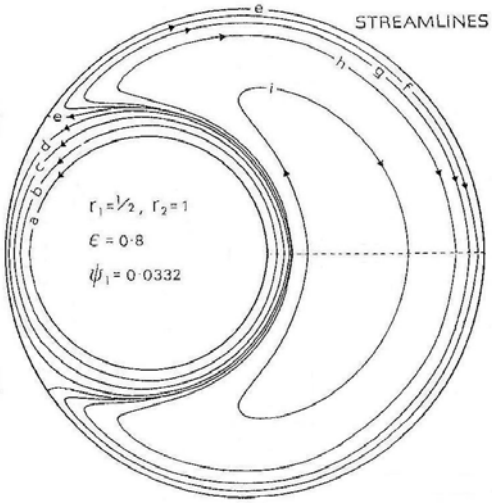
**Governing Equation:**

$\nabla^4\psi(\underset{\sim}{x}) = 0, \quad x \in \Omega$

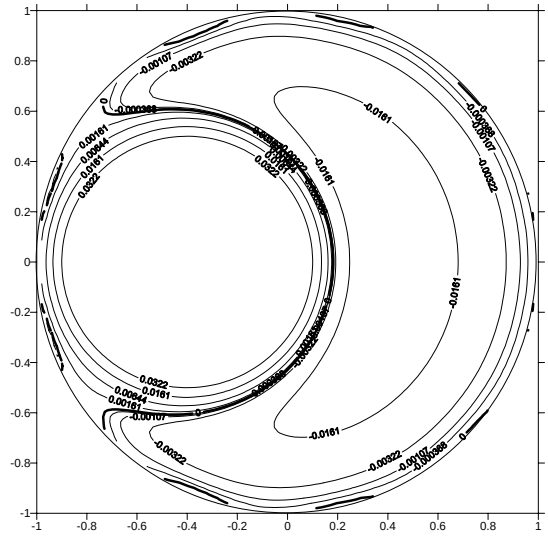
**Boundary Conditions:**

$\psi = \psi_1 = 0.0322$ and $\dfrac{\partial\psi}{\partial n} = \Omega_1 r_1 = 0.5$ on $B_1$

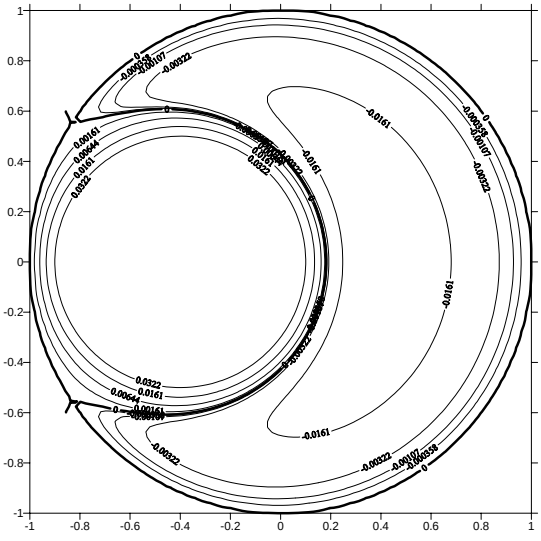
$\psi = 0$ and $\dfrac{\partial\psi}{\partial n} = 0$ on $B_2$



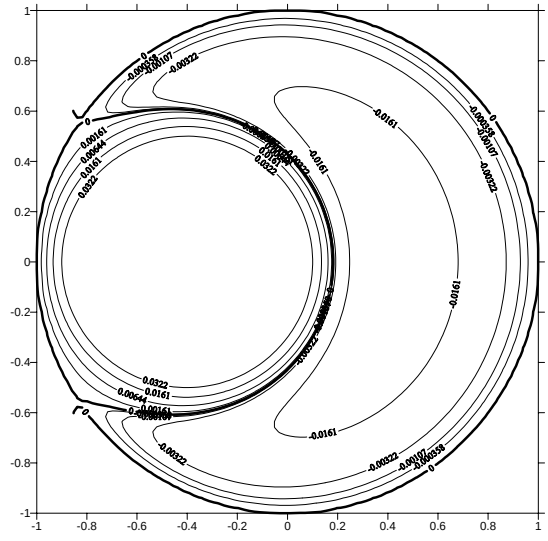

Numerical solution []



BIEM (M=10)



BIEM (M=20)



BIEM (M=40)

【檔名：lubrication-2.doc 日期：2005/3/9/蕭嘉俊製表】