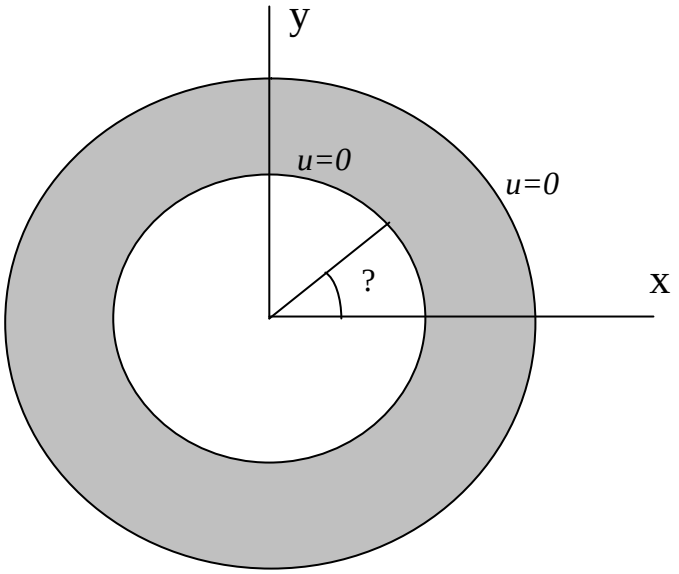
程式 48 Spurious eigenvalue (annular case)

一多連通問題(同心圓)如下



將 t **對** θ **作** Fourier series **展開(利用** UT **式)，找出當** t **產生** non-trivial solution **時之** eigenvalue **與** eigenvector.

Step 1：Kernel decomposition (degenerate expression).

Step 2：Fourier expansion for boundary density.

Step 3：Construct the boundary integral formulation.

Step 4：Find the true and spurious eigensolutions.

Step 5：Add CHIEF points to suppress the spurious eigensolutions.

Step 6：Solve the problem numerically.

References：

【1】J. T. Chen, L. W. Liu and H.-K. Hong, 2003, Spurious and true eigensolutions of Helmholtz BIEs and BEMs for a multiply-connected problem, Royal Society London Series A, Vol.459, No.2036, pp.1891-1925. (SCI and EI)
