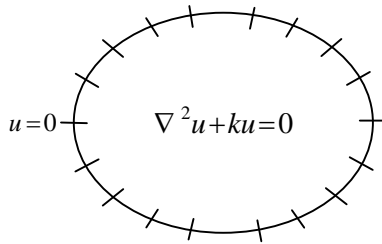
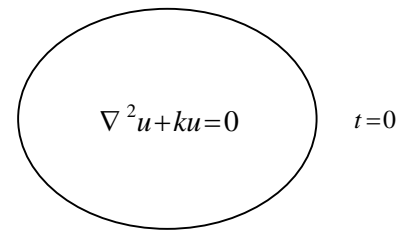


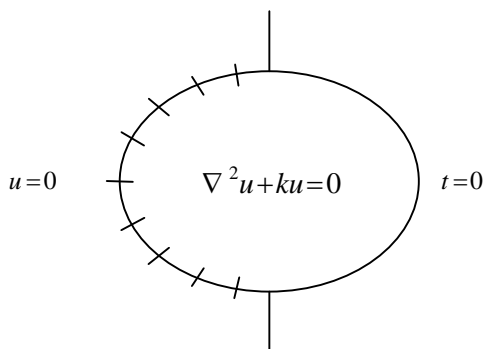
程式 42 橢圓形特徵值問題



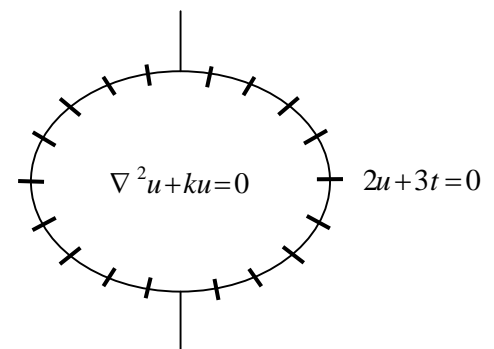
A diagram of an ellipse with tick marks along its boundary. The boundary is labeled $u=0$ on the left. Inside the ellipse, the equation $\nabla^2 u + ku = 0$ is written.



A diagram of an ellipse with the equation $\nabla^2 u + ku = 0$ inside. The boundary is labeled $t=0$ on the right.



A diagram of an ellipse with tick marks along its boundary. The boundary is labeled $u=0$ on the left and $t=0$ on the right. Inside the ellipse, the equation $\nabla^2 u + ku = 0$ is written.



A diagram of an ellipse with tick marks along its boundary. The boundary is labeled $2u+3t=0$ on the right. Inside the ellipse, the equation $\nabla^2 u + ku = 0$ is written.

1. Solve the eigensolution for $u=0$ on all the boundary.
2. Solve the eigensolution for $t=0$ on all the boundary.
3. Solve the eigensolution for the above problems.
4. Examine the true and spurious solutions by plotting S versus k .
5. Study the spurious eigenvalues for the problem with mixed-typed B.C.
6. Study the degenerate scale for the problem with mixed-typed B.C.
7. Study the fictitious frequency for the problem with mixed-typed B.C.

1. 對退化的影響。
2. 對假根的影響。
3. 對虛擬頻率的影響。
4. 不均勻簡單邊界條件的結果。
5. 不對稱元素切割。(不等邊長佈等元素數)
6. 均勻之複合型邊界條件。
7. 多連通問題。
 - 具 0/0 之問題，元素切割增多不會解決問題，反是使誤差變大。

