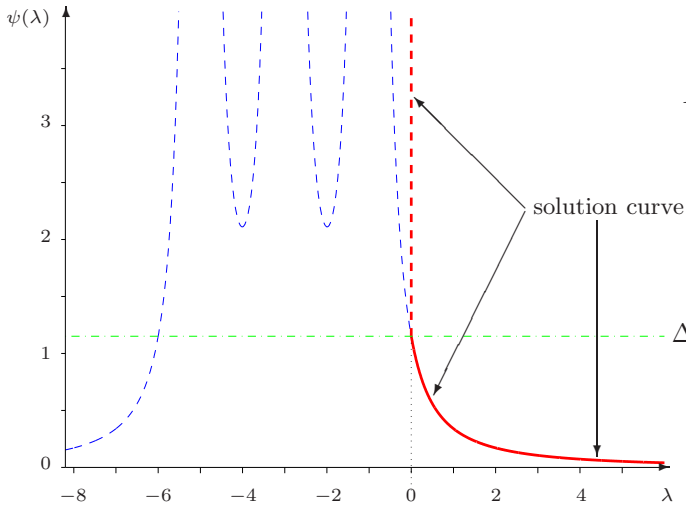
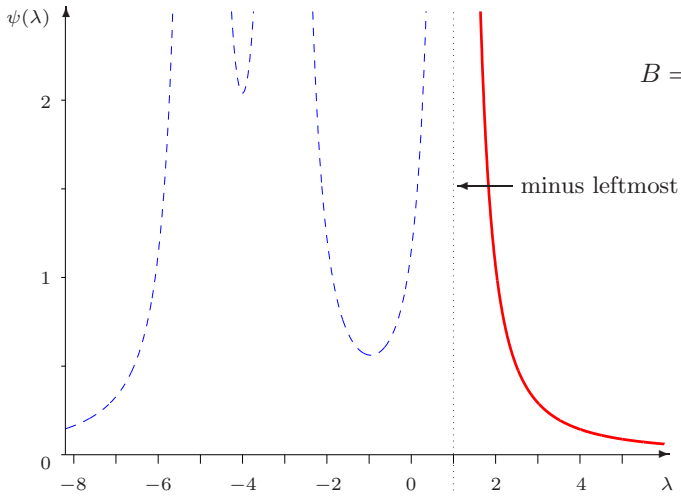


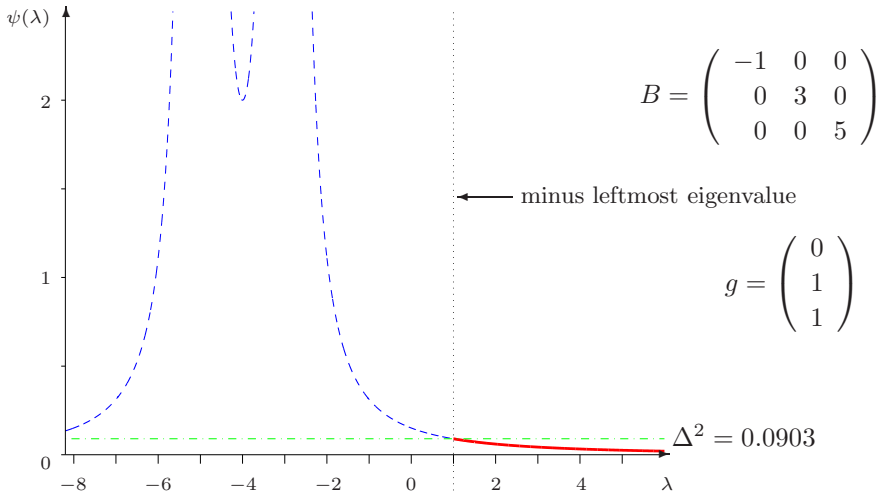
$$B = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 5 \end{pmatrix}$$

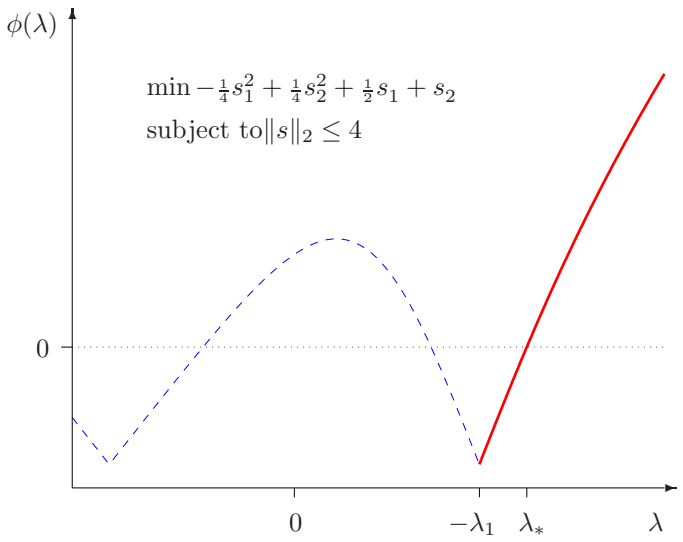
$$g = \begin{pmatrix} 1 \\ 1 \\ 1 \end{pmatrix}$$



$$B = \begin{pmatrix} -1 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 5 \end{pmatrix}$$

$$g = \begin{pmatrix} 1 \\ 1 \\ 1 \end{pmatrix}$$


$\psi(\lambda)$
2
1
0
−8
−6
−4
−2
0
2
4
λ
$B = \begin{pmatrix} -1 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 5 \end{pmatrix}$
minus leftmost eigenvalue
$g = \begin{pmatrix} 0 \\ 1 \\ 1 \end{pmatrix}$
$\Delta^2 = 0.0903$


$\phi(\lambda)$
$\min -\frac{1}{4}s_1^2 + \frac{1}{4}s_2^2 + \frac{1}{2}s_1 + s_2$
subject to$\|s\|_2 \leq 4$
0
0
$-\lambda_1$
λ_*
λ