## Nijenhuis sunset



At every point in the (x,y)-plane the Nijenhuis matrix

 $\begin{pmatrix} x & 1 \\ y & 0 \end{pmatrix}$ 

has two eigenvalues, except for the parabola, where the eigenvalues coincide.

Above the parabola the level-sets of the eigenvalue functions are straight lines which are tangent to the parabola.

Underneath the parabola the eigenvalues are complex and we have displayed the levelsets of their imaginary parts.