Recap

- A general pair of first order ODEs can be cast as gradient descent in a potential V and sliding along contours of constant H.
- The linearized equations can be cast as a 2×2 matrix, whose eigenvalues determine the exponential rates along the two eigendirections.
- Symmetric matrices, corresponding to gradient descent in a quadratic potential, have two real eigenvalues. The eigenvalues of an asymmetric matrix may or may not be complex, with complex eigenvalues indicative of oscillatory behavior.