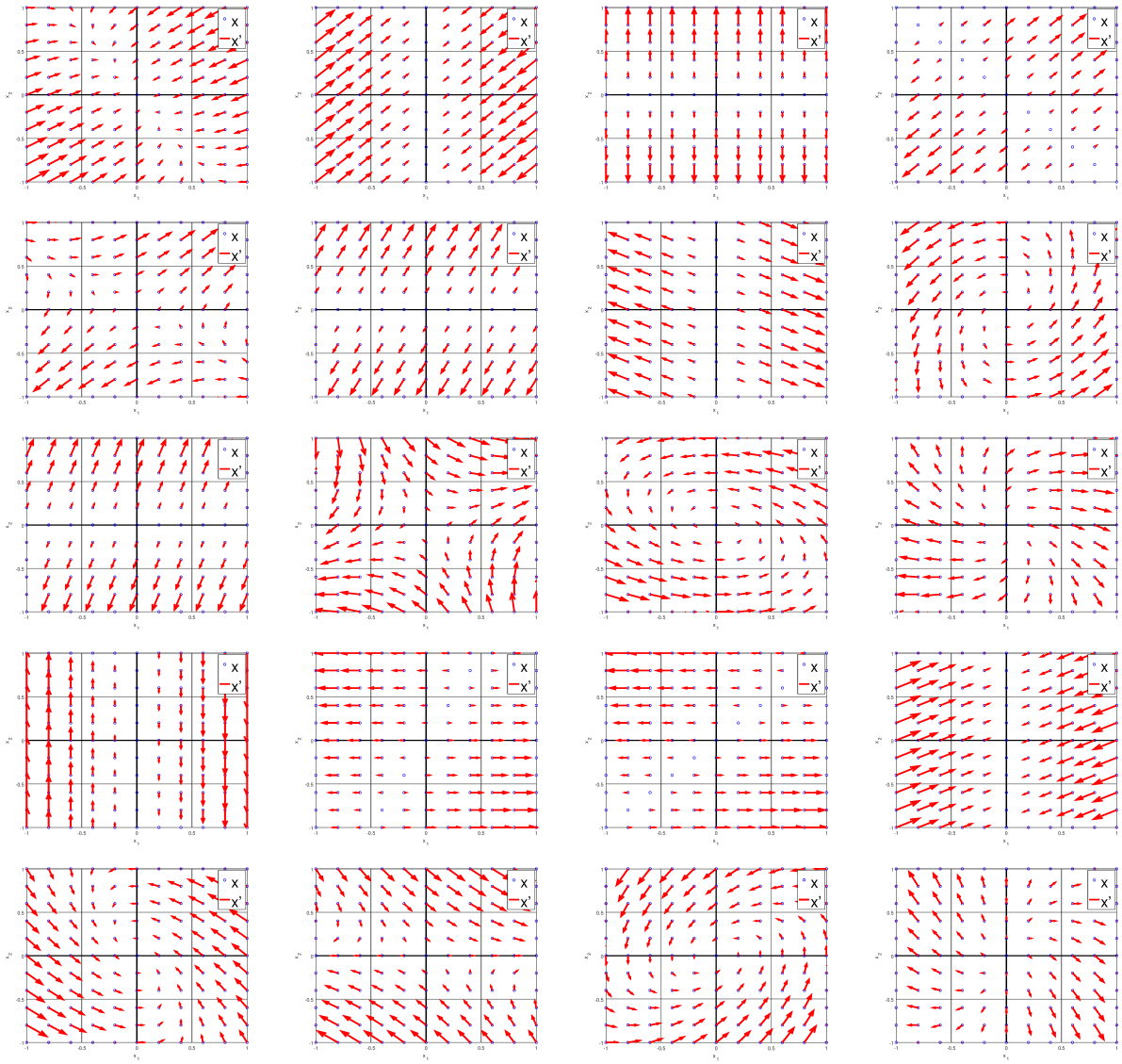
Introduction

Consider the differential equation $\dot{x}(t) = A\,x(t)$ in $\mathbb{R}^2$ with a constant 2×2 matrix A. For each point $x = (x_1, x_2)^\top \in \mathbb{R}^2$, the vector $A\,x$ shows the direction of evolution starting from that point.

Problems

Given the vectorfield $x \mapsto A\,x$, suggest a plausible matrix A.



R.A., November 8, 2019