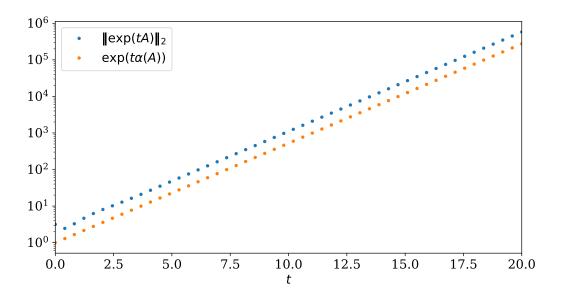
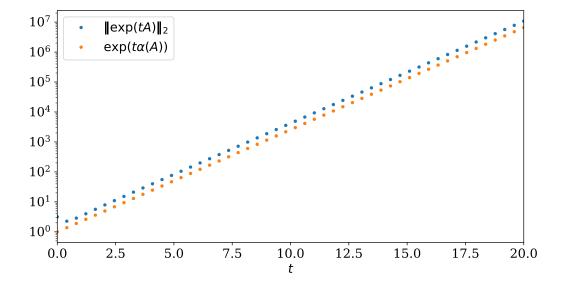
CMSE 823 – Numerical Linear Algebra Homework 9

Alexander Harnisch

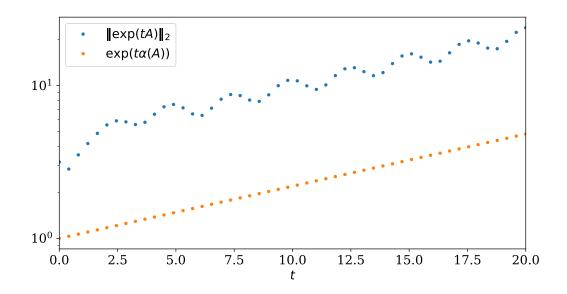
24.3

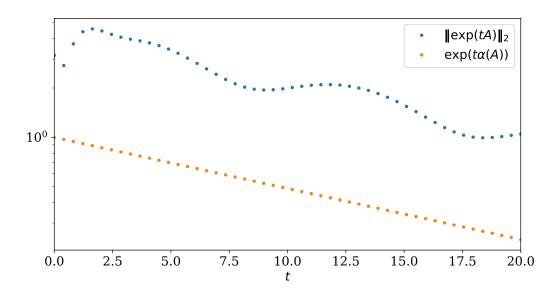
Here are some examples of the resulting plot. Most of the plots turn out to look something like this:

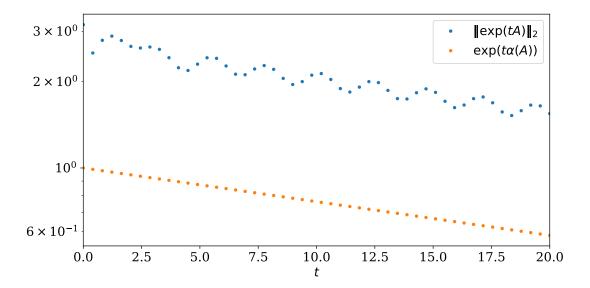




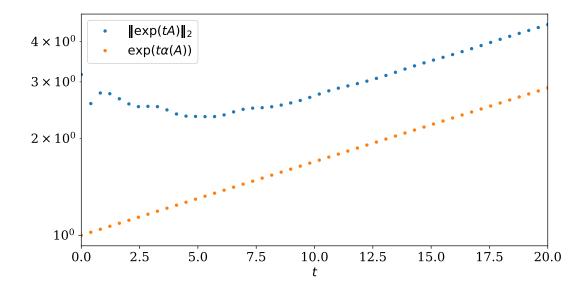
However, sometimes oscillations occur:

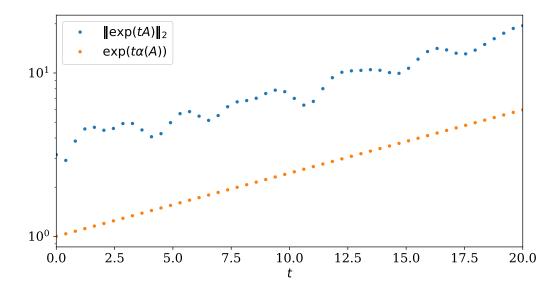






And there are also some where it seems to be something in between:





I've played around with this a lot and tried to figure out what leads to the different outcomes. Sadly I did not come up with anything conclusive. I think it most likely has something todo with the imaginary parts of the eigenvalues. Where some combination of more imaginary contribution leads to the oscillations. However, I did not find a conclusive rule.