# Master Plan

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| Classification of the criticel point $(0,0)$ of $x' = Ax, \lvert\mathbf{A}\rvert \neq 0$. | | |
|---|---|---|
| Types | Type of Critical Point | Stability |
| 1. Real unequal eigenvalues of same sign | | |
| • $\lambda_1 > \lambda_2 > 0$ | Improper node/node | Unstable |
| • $\lambda_1 < \lambda_2 < 0$ | Improper node/node | Asym. stable |
| 2. Real unequal eigenvalues of opposite sign | | |
| • $\lambda_2 < 0 > \lambda_1$ | Saddle point | Unstable |
| 3. Equal eigenvalues | | |
| Subtype 1: Two Independent vectors | | |
| • $\lambda_1 = \lambda_2 > 0$ | Proper node | Unstable |
| • $\lambda_1 = \lambda_2 < 0$ | Proper node | Asym. stable |

# 1 Master Plan

This plan outlines and itemizes tasks and projects which need to be completed for me to get my degree.

- $\pi^+$ neutron analysis note
- $K^\pm$ analysis
- $K^\pm$ analysis note
- dissertation proposal
- SIDIS Cross Section
- Inclusive Note (to be used as thesis chapter)
- EVA Fits to SIDIS
- Thesis Writing
- Defend