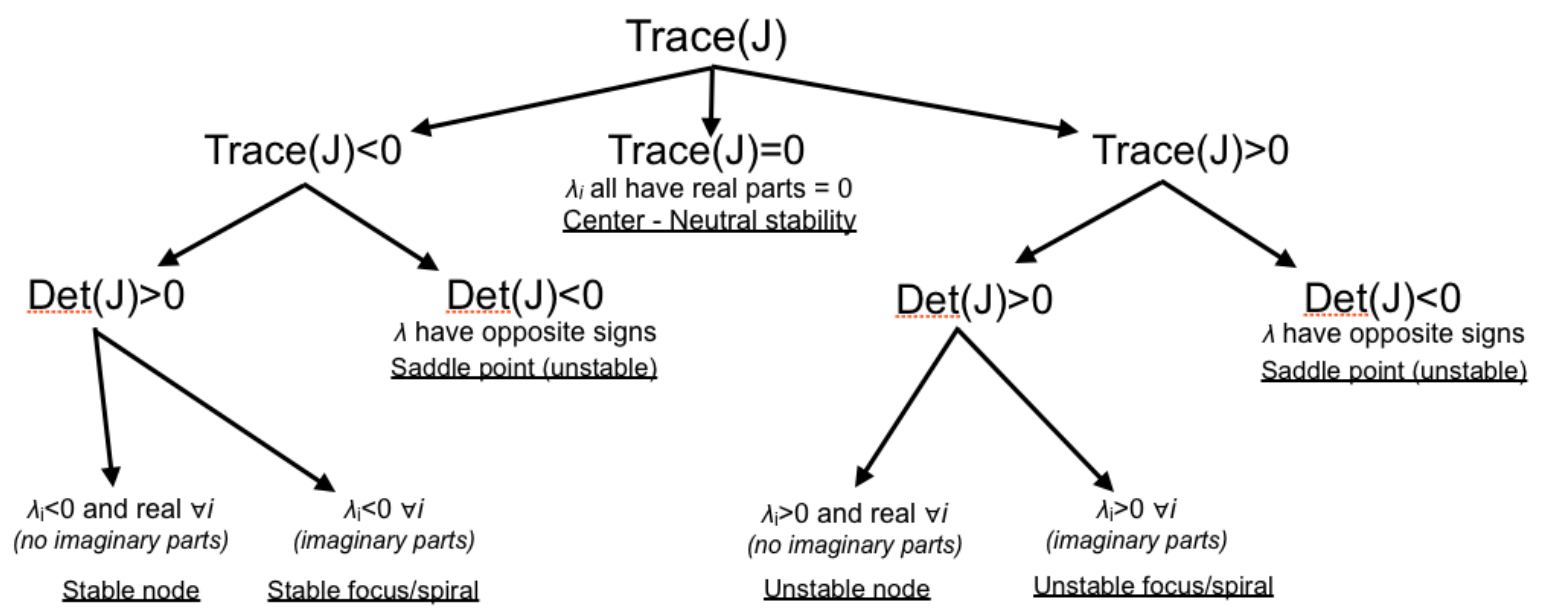
Trace(J)
Trace(J)<0
Trace(J)=0
λ_i all have real parts = 0
Center - Neutral stability
Trace(J)>0
Det(J)>0
Det(J)<0
λ have opposite signs
Saddle point (unstable)
Det(J)>0
Det(J)<0
λ have opposite signs
Saddle point (unstable)
λ_i<0 and real $\forall i$
(no imaginary parts)
Stable node
λ_i<0 $\forall i$
(imaginary parts)
Stable focus/spiral
λ_i>0 and real $\forall i$
(no imaginary parts)
Unstable node
λ_i>0 $\forall i$
(imaginary parts)
Unstable focus/spiral