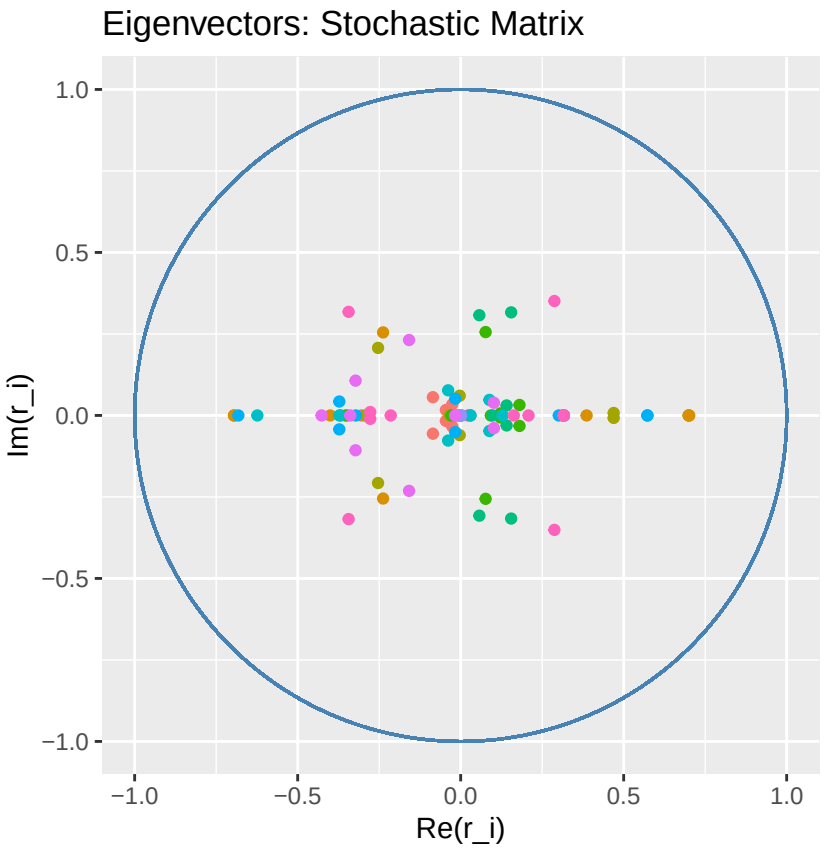
Random Matrix Analysis

Ali Taqi

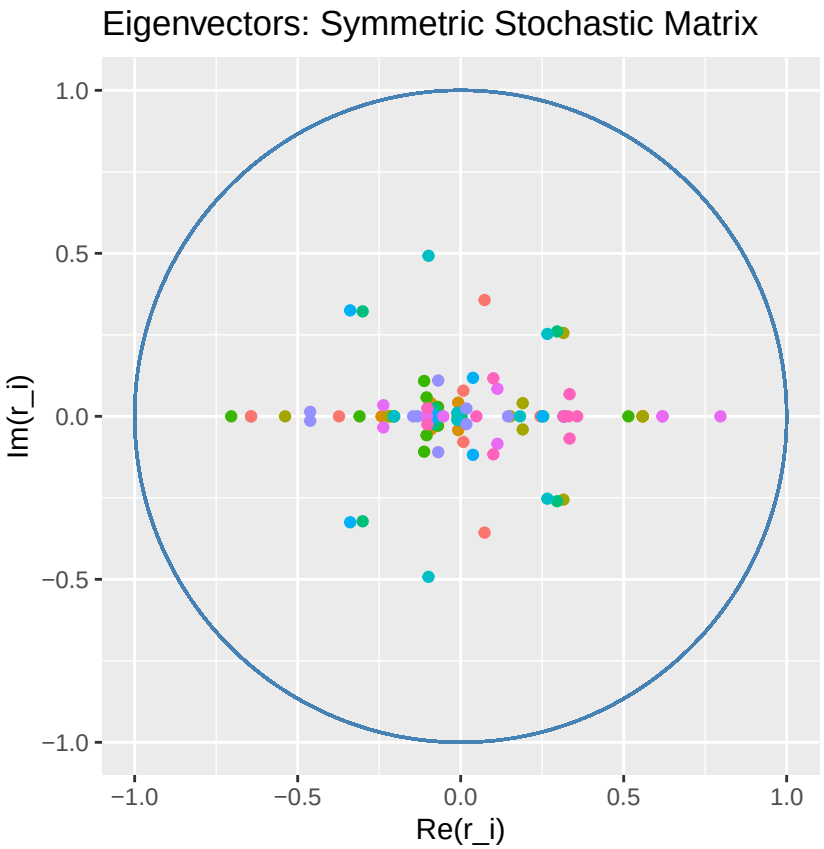
Stochastic Matrices

```
set.seed(23)
P <- RM_stoch(M, sparsity = T)
if(bool_plot){eigen_plot(P, loud = bool_loud, "Stochastic")}
```



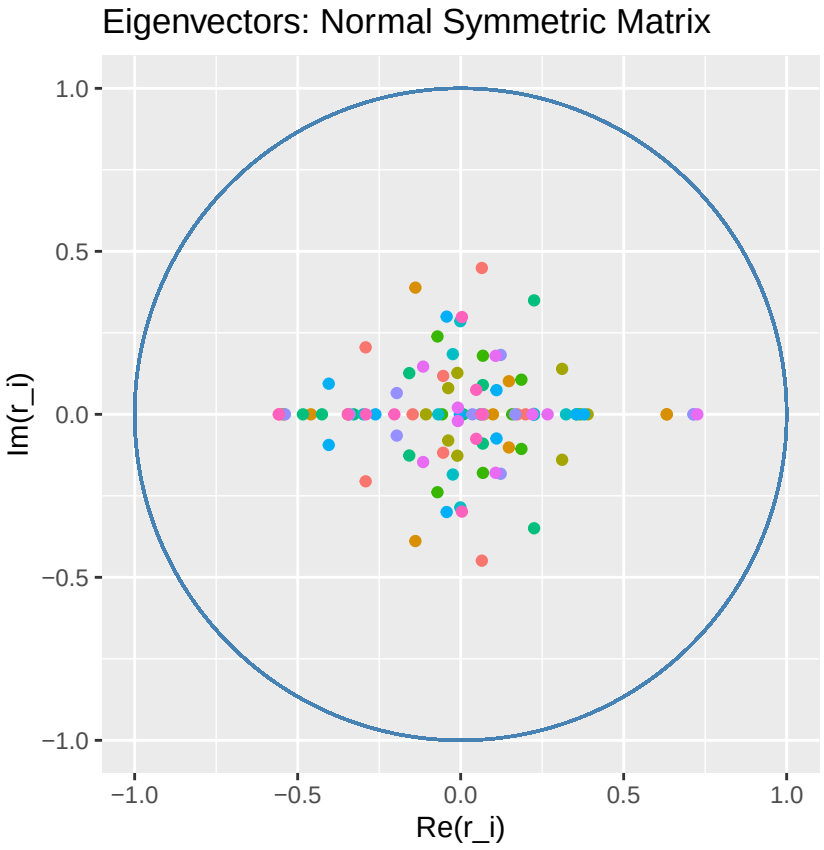
Symmetric Stochastic Matrices

```
set.seed(23)
P <- RM_stoch(M, symm = T)
if(bool_plot){eigen_plot(P, loud = bool_loud, "Symmetric Stochastic")}
```



Normal Symmetric Matrices

```
set.seed(23)
P <- RM_normal(M, normal_args = c(0,1), symm = T)
if(bool_plot){eigen_plot(P, loud = bool_loud, "Normal Symmetric")}
```



Tridiagonal Matrices

```
set.seed(23)
P <- RM_trid(M)
if(bool_plot){eigen_plot(P, loud = bool_loud, "Tridiagonal")}
```