

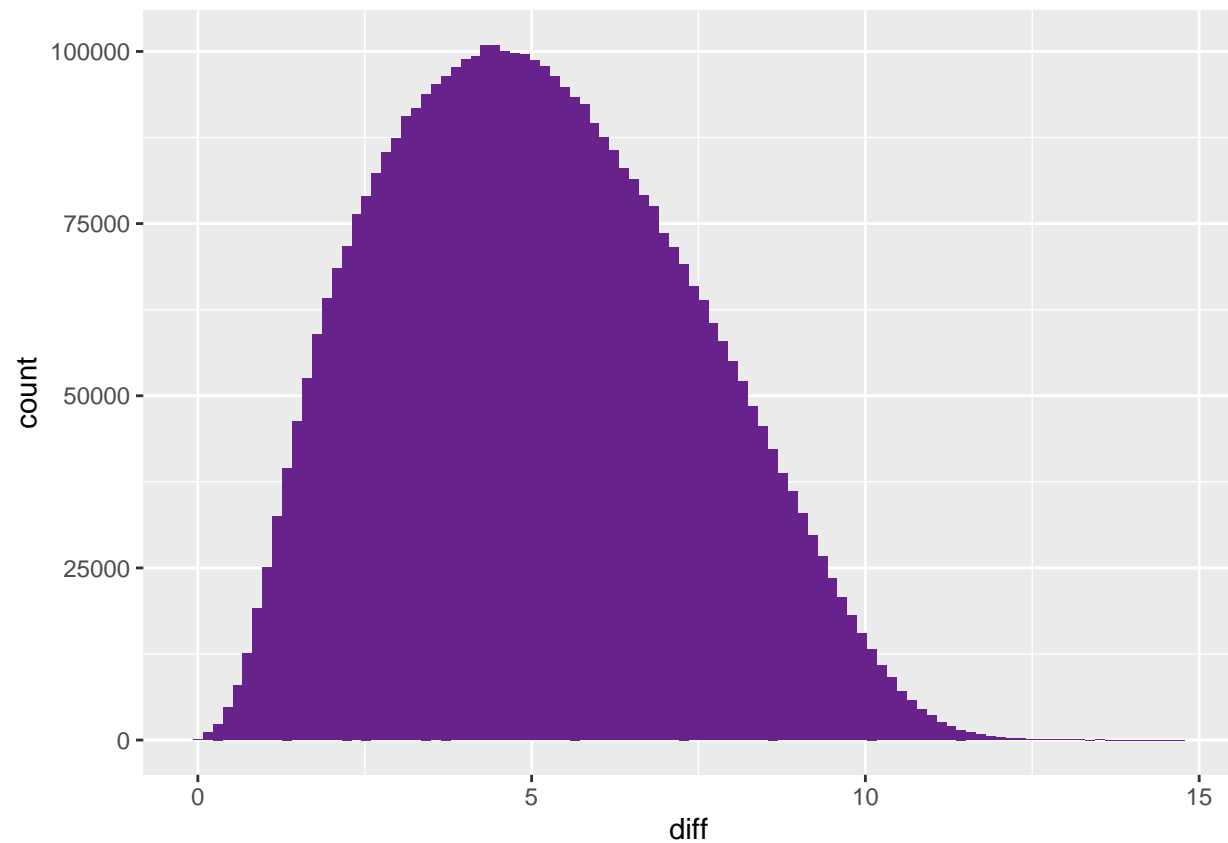
# Eigen-Dev

Ali Taqi

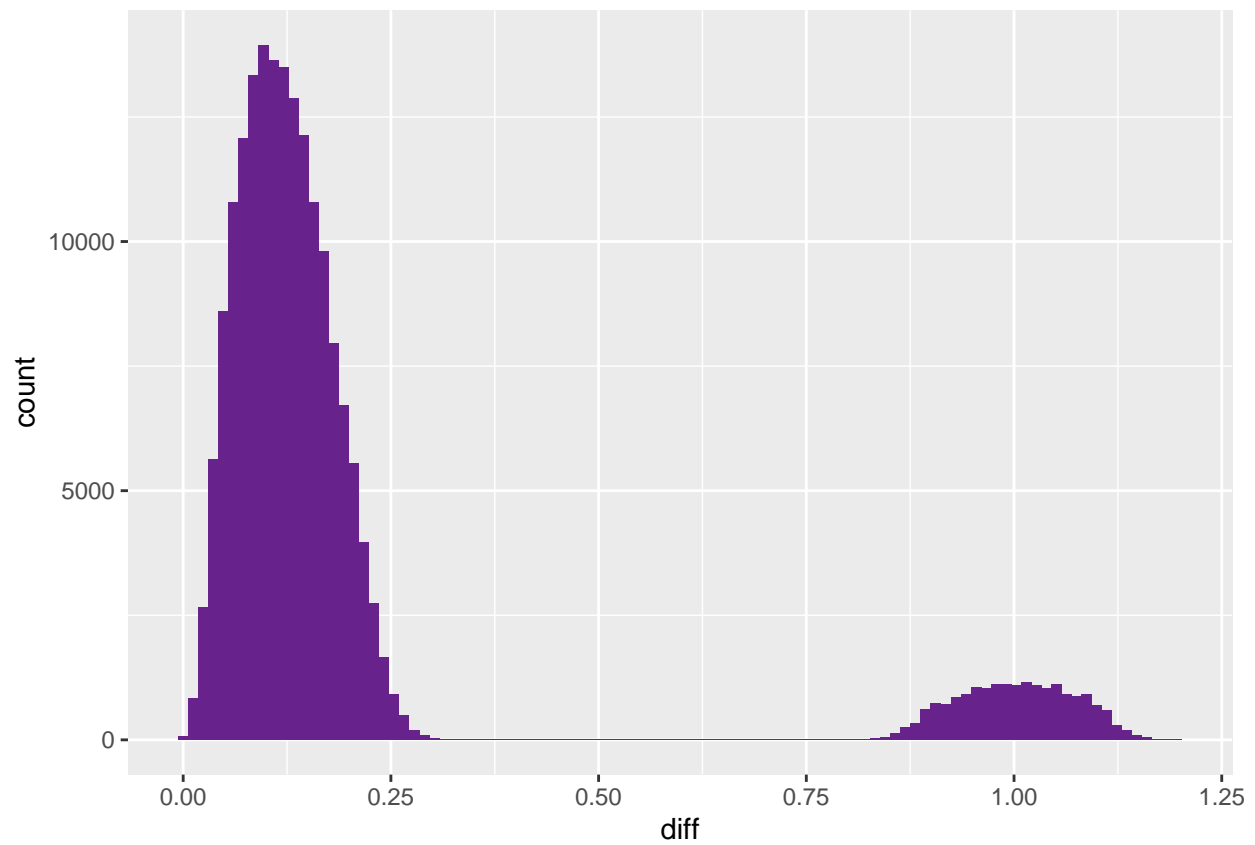
2/23/2021

```
dispersion.plot <- function(entries, bins = 100){  
  #entries <- dispersion(array)  
  ggplot() +  
    geom_histogram(data = entries, aes(x = diff), fill = "darkorchid4", bins = bins)  
}
```

```
N <- 30  
P <- RME_norm(N, size = 10000)  
diffs <- dispersion(P)  
dispersion.plot(diffs)
```

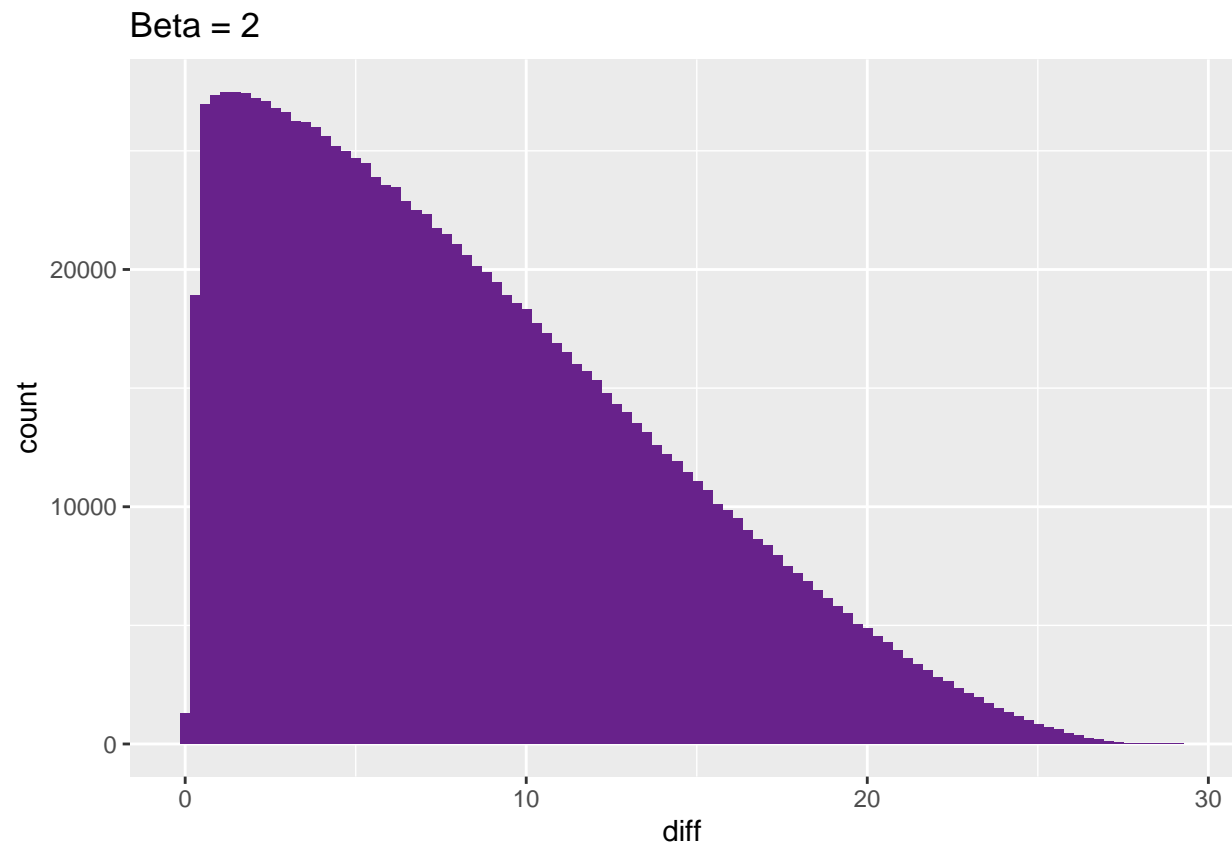


```
N <- 20  
P <- RME_stoch(N = 20, size = 1000)  
diffs <- dispersion(P)  
dispersion.plot(diffs)
```



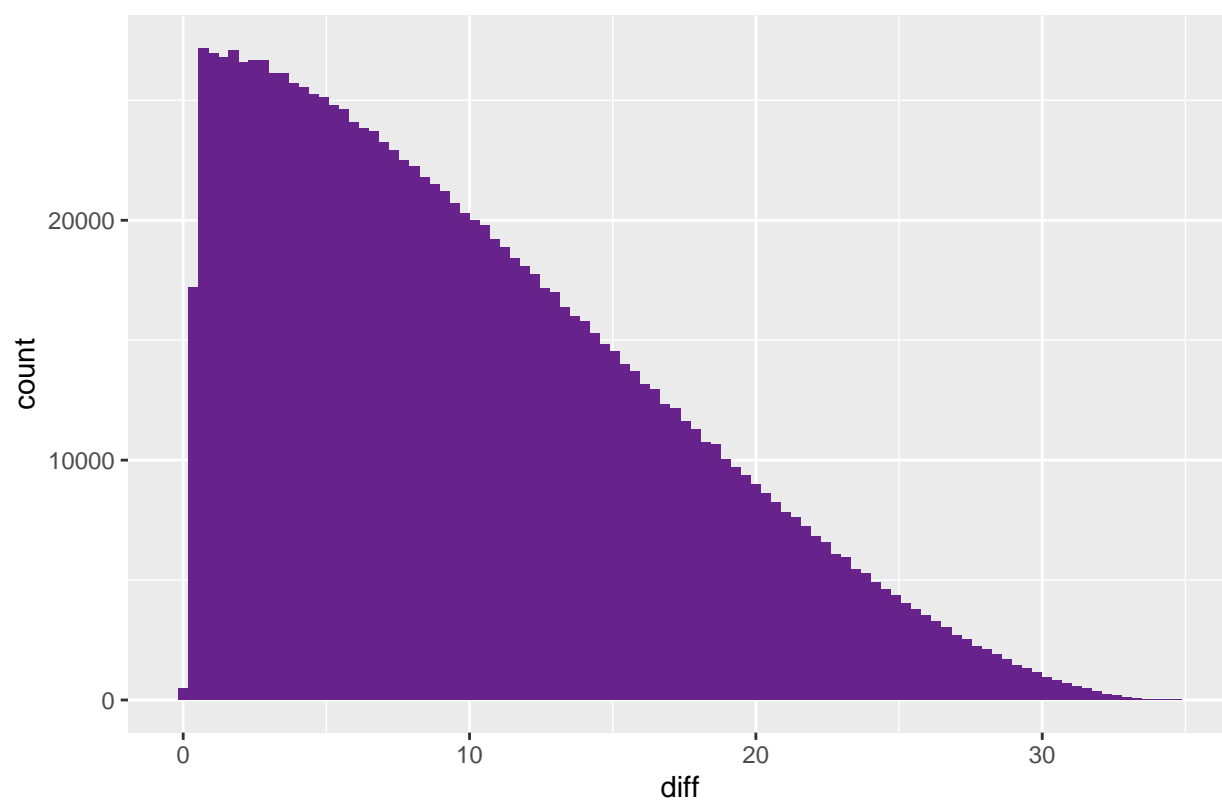
```
beta.DISP <- function(beta, bins = 100){  
  P <- RME_beta(N = 50, beta, size = 1000)  
  diffs <- dispersion(P)  
  dispersion.plot(diffs, bins) + labs(title = paste("Beta =", beta))  
}
```

```
beta.DISP(2)
```



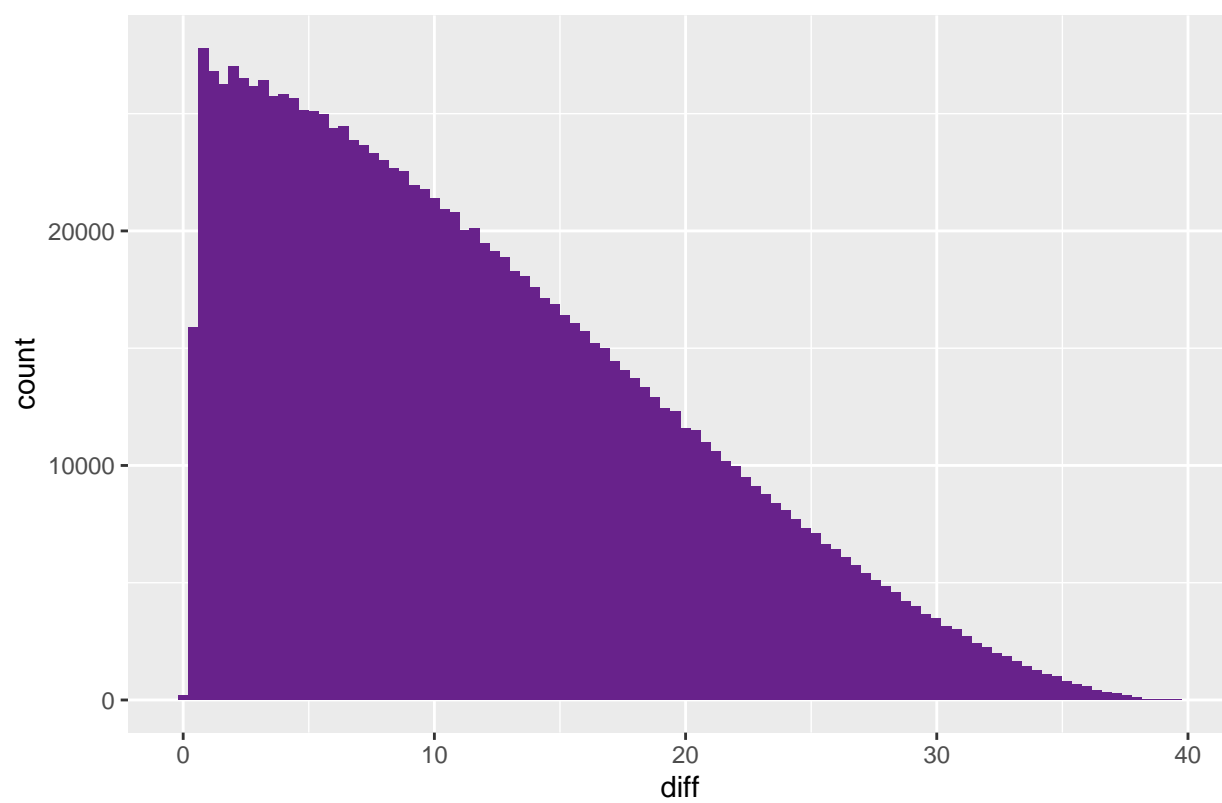
beta.DISP(3)

Beta = 3

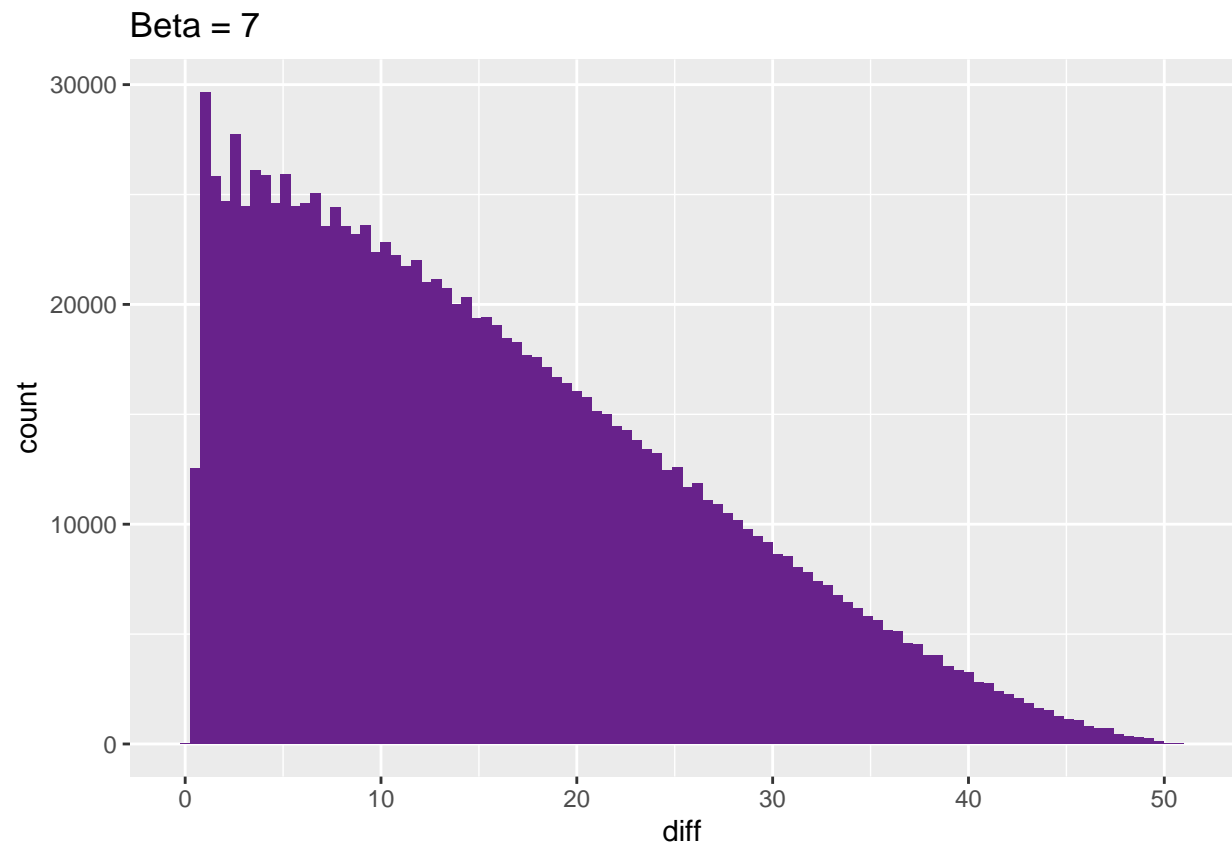


beta.DISP(4)

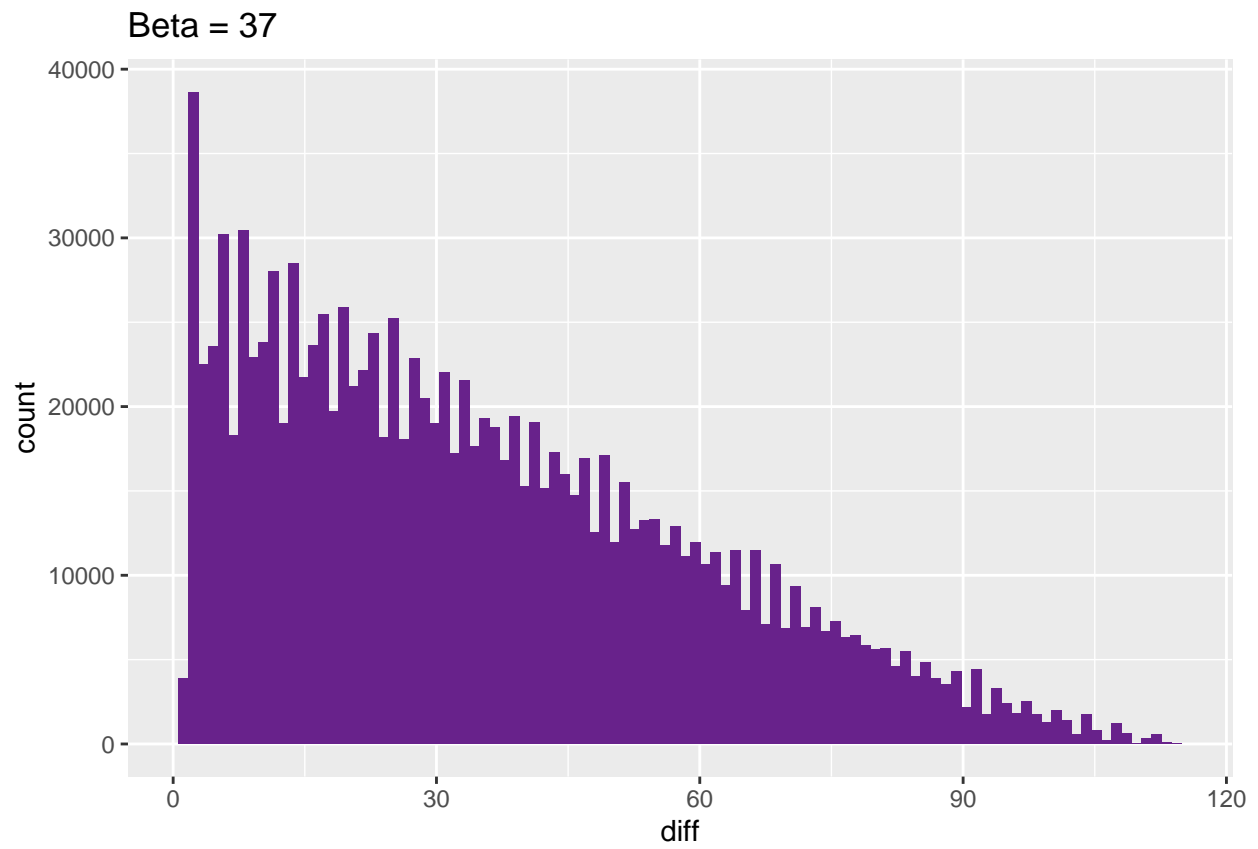
Beta = 4



beta.DISP(7)



beta.DISP(37)



beta.DISP([92](#))

