Colorful Arcs

Zepeng (Phoenix) Mu 3/4/2018

```
theta = seq(-2 * pi, 2 * pi, length = 300)
a = sin(theta)
x = a^2 - mean(a^2)
y = cos(theta) + a
y = y * 0.6
number_of_curves = 60
red = sample(seq(0.5, 1, 0.1), number_of_curves, replace = T)
green = sample(seq(0, 0.5, 0.1), number_of_curves, replace = T)
blue = sample(seq(0.5, 1, 0.1), number_of_curves, replace = T)
myCol = rgb(red, green, blue, alpha = 0.5)
myLwd = sample(seq(0.4, 1, 0.1), number_of_curves, replace = T)
shrink = seq(0.3, 1, length.out = number_of_curves)
mypar = par(bg = 'black', mar = rep(0.5, 4))
plot.new()
plot.window(xlim = range(x), ylim = range(y), asp = 1)
for (i in 1:number_of_curves) {
 lines(x * shrink[i], y * shrink[i], lwd = myLwd[i], col = myCol[i])
}
# signature
legend("bottomright", legend="@ Phoenix", bty = "n", text.col="gray70")
```

