Beta_Dist

2023-11-14

```r
library(ggplot2)

# Parameters for the Beta distributions
parameters <- data.frame(
  alpha = c(0.5, 0.5, 1, 1, 1, 2),
  beta = c(0.5, 1, 0.5, 1, 2, 1)
)

x_values <- seq(0, 1, length.out = 100)

# Empty data frame to store the density values
density_data <- data.frame()

# Calculate density values for each set of parameters
for(i in 1:nrow(parameters)){
  y_values <- dbeta(x_values, shape1 = parameters$alpha[i], shape2 = parameters$beta[i])
  density_data <- rbind(density_data, data.frame(x = x_values, y = y_values, group = paste("alpha", para
}

# Plot
ggplot(density_data, aes(x = x, y = y, colour = group)) +
  geom_line(size = 0.9) +
  labs(title = "",
       y = "density",
       x = "",
       colour = "Parameters") +
  theme_minimal()
```

```
## Warning: Using 'size' aesthetic for lines was deprecated in ggplot2 3.4.0.
## i Please use 'linewidth' instead.
## This warning is displayed once every 8 hours.
## Call 'lifecycle::last_lifecycle_warnings()' to see where this warning was
## generated.
```