

# Relatório do Trabalho de Estatística Bayesiana I

## Mistura de Normais com Variância Contaminada

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Belo Horizonte, 2 de dezembro de 2019

# Introdução

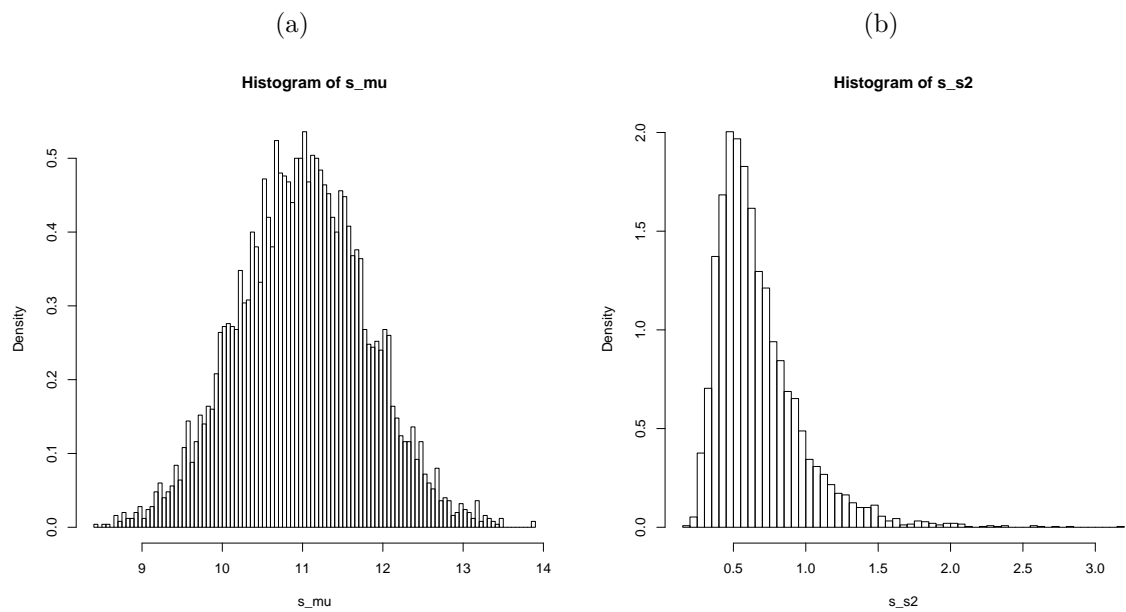


Figura 1: Distribuições a priori

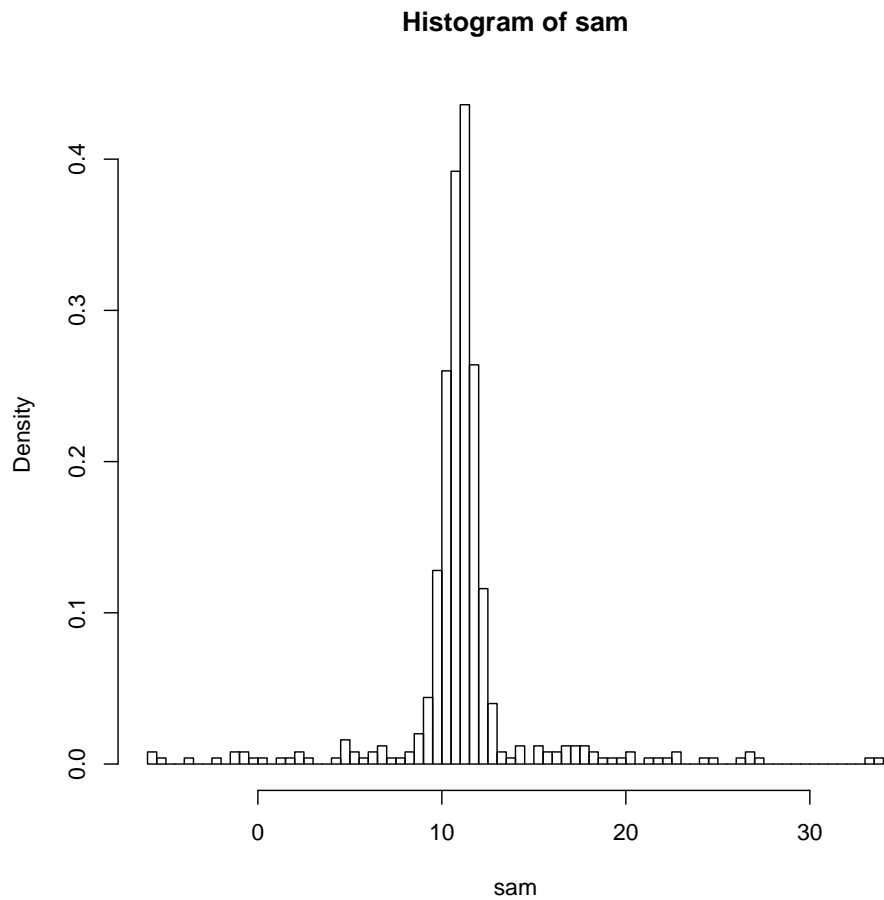


Figura 2: Amostra de tamanho 500.

# O Método da Quadratura de Riemann

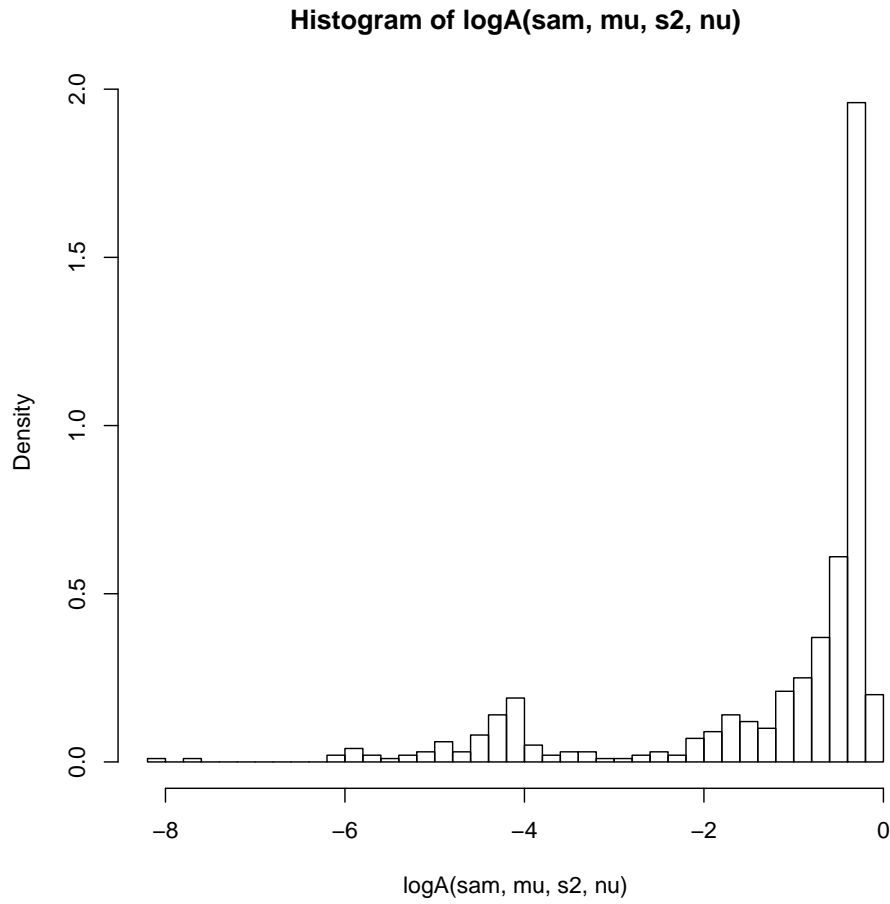


Figura 3: Amostra de tamanho 500.

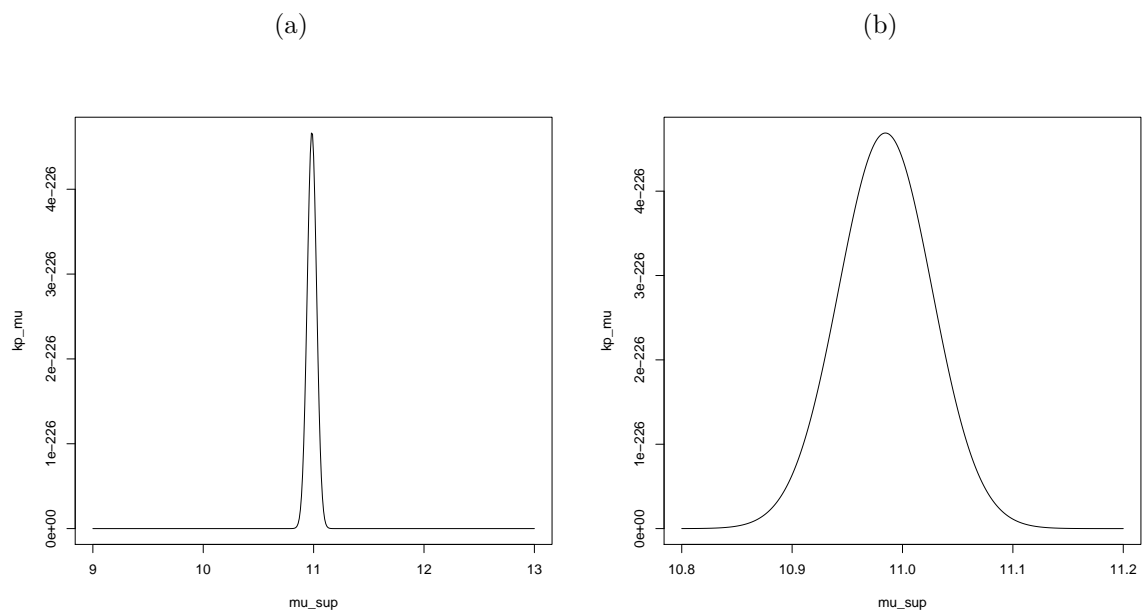


Figura 4: Grade de  $\mu$

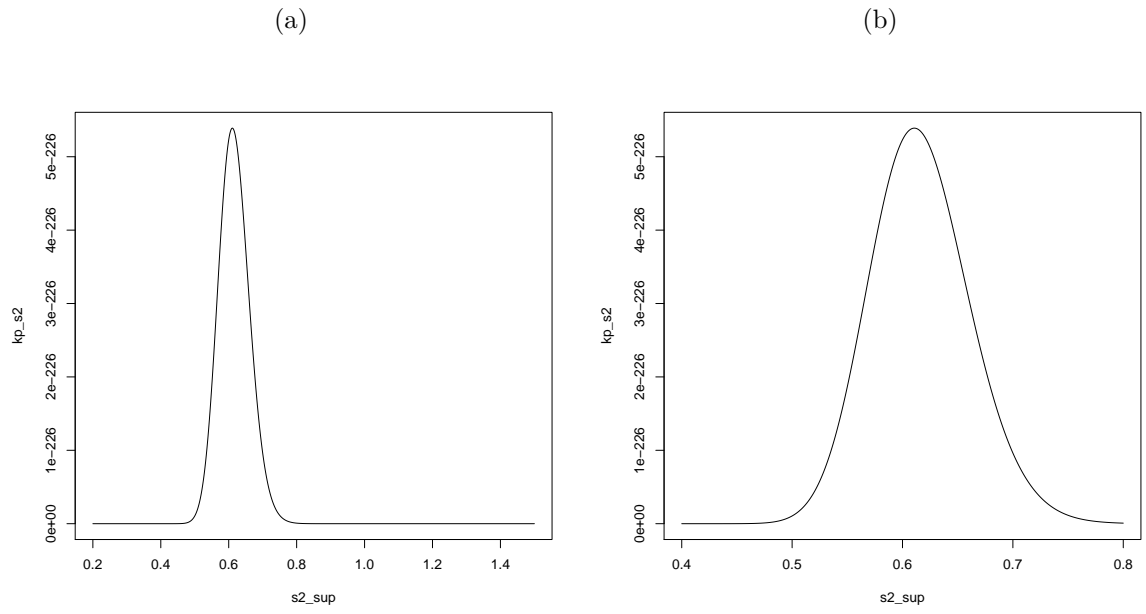


Figura 5: Grades de sigma

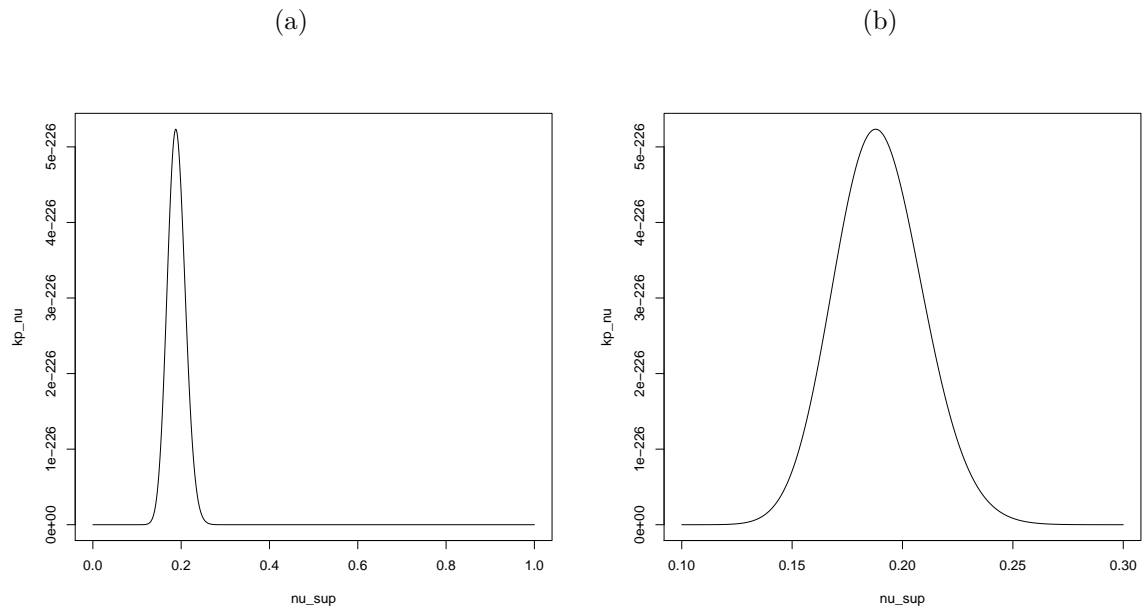


Figura 6: Grades de nu

**O Método da Reamostragem Ponderada**

**O Método de Monte Carlo via Cadeias de Markov**

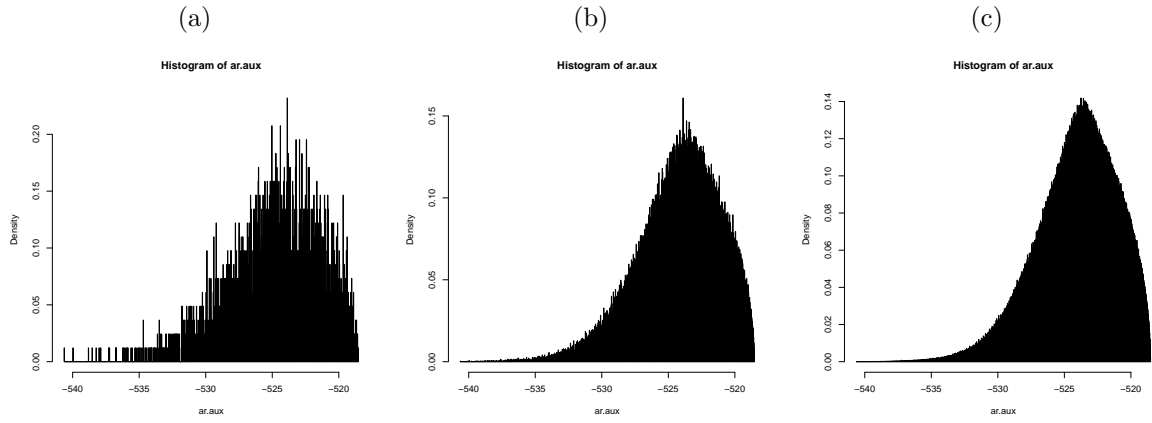


Figura 7: Calculo da constante de proporcionalidade

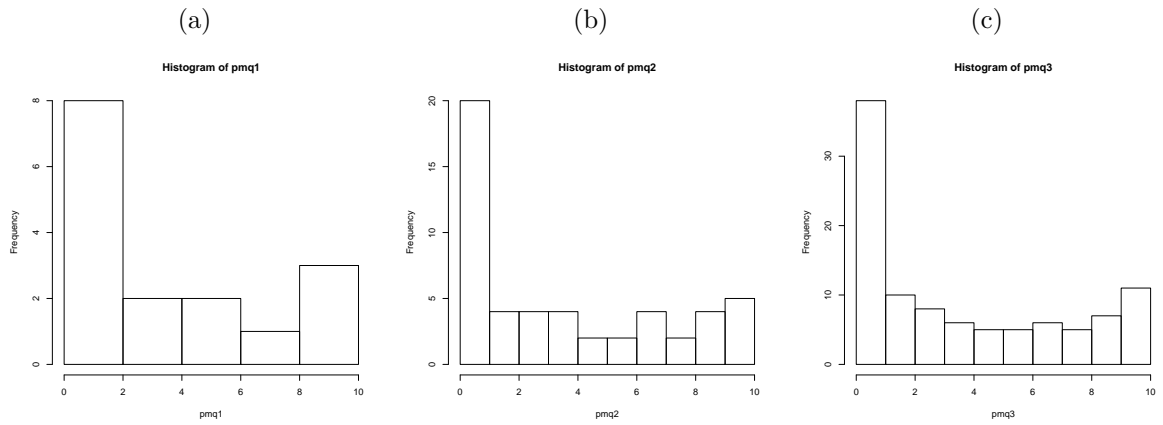


Figura 8: Posteriores de  $\mu$

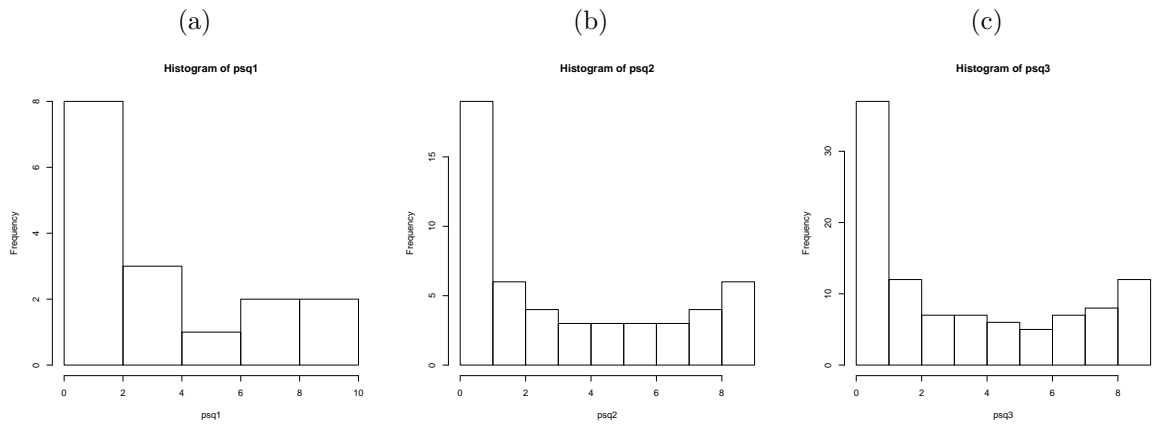


Figura 9: Posteriores de  $\sigma$

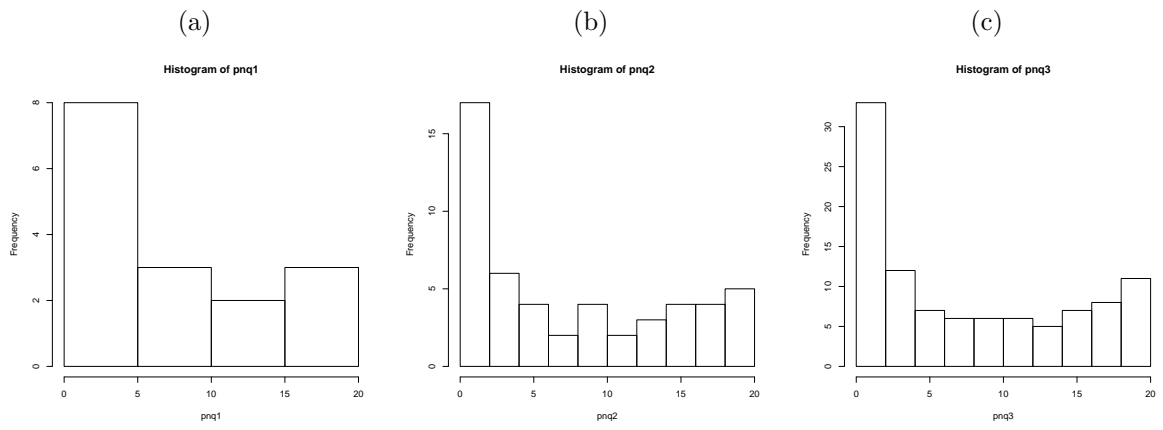


Figura 10: Posteriori de nu