

UCLA Biostatistics 285: Homework 2

Instructor: Dr. Michele Guindani

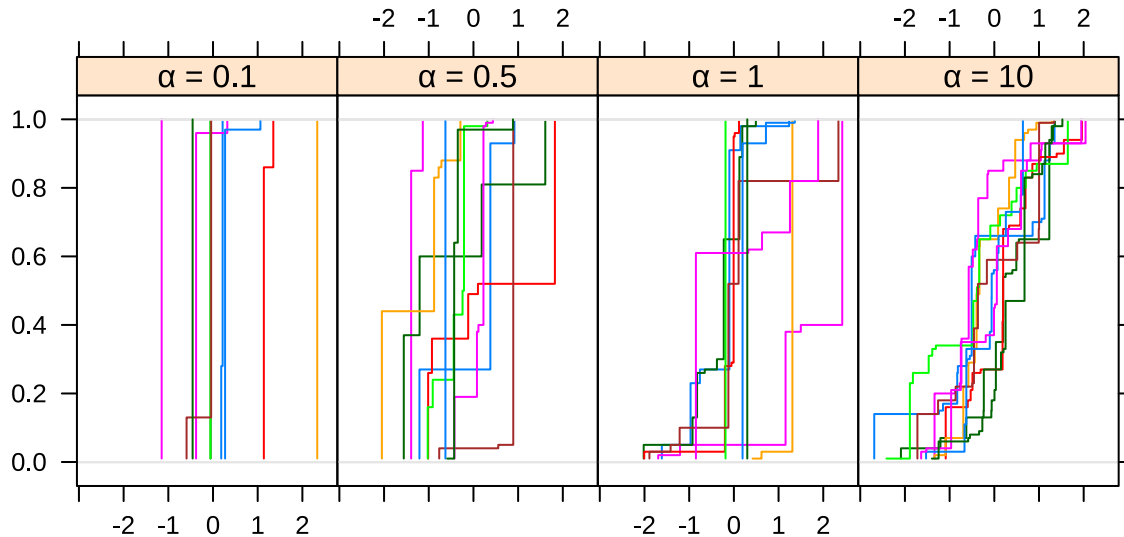
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1 Problem 1

1.1 Part 1

The function `Sethu_jump` generates the jumps given a truncation option and a α . The `generate_DPH` uses a jump function (here we use the `Sethu_jump`) and takes input a base measure and its parameters along with α , truncation parameter K and number of samples to be generated. The final output is realizations of $DP(\alpha, \mathcal{N}(0, 1))$ approximated by finite truncation with 20 terms as described in Ishwaran and Zarepour (2002).



References

Ishwaran, Hemant, and Mahmoud Zarepour. 2002. "Exact and Approximate Sum Representations for the Dirichlet Process." *Canadian Journal of Statistics* 30 (2): 269–83. <https://doi.org/https://doi.org/10.2307/3315951>.