



# Tree Normal Maximum Likelihood

## 1 Why

What if we do maximum likelihood and we only consider tree normal densities.

## 2 Definition

Let  $x^1, \dots, x^n$  be a dataset in  $\mathbf{R}^d$ . We want to find the multivariate normal which factors according to a tree which has maximal likelihood on the dataset.

## 3 Results

**Proposition 1.** *TODO*