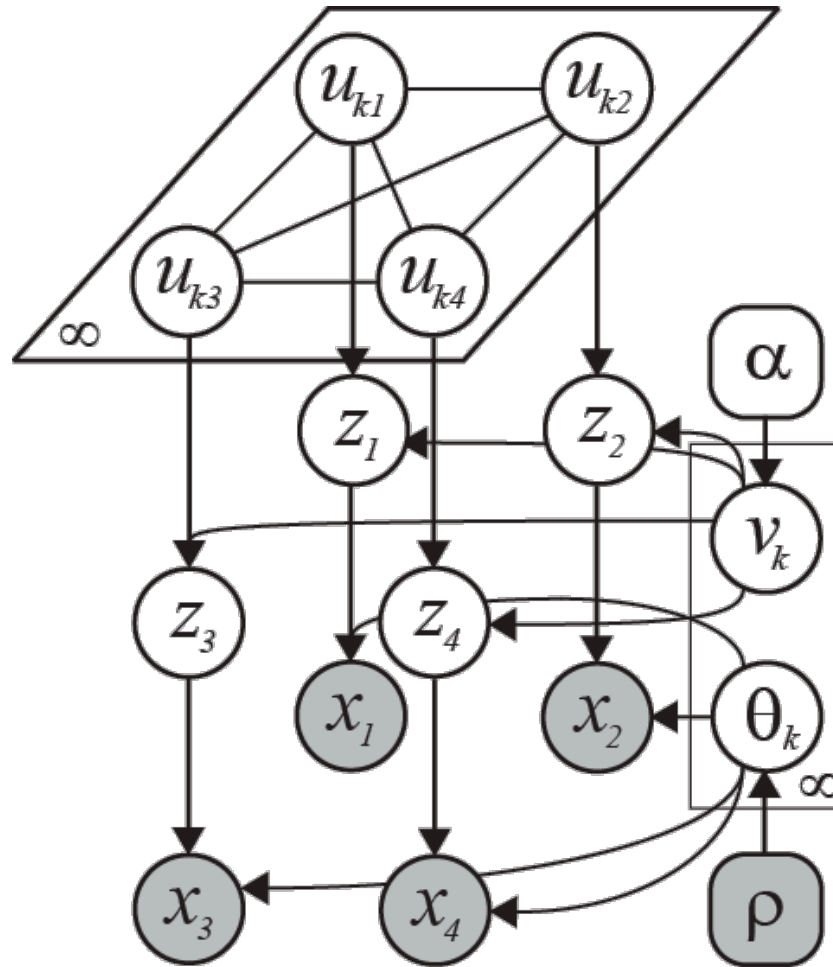
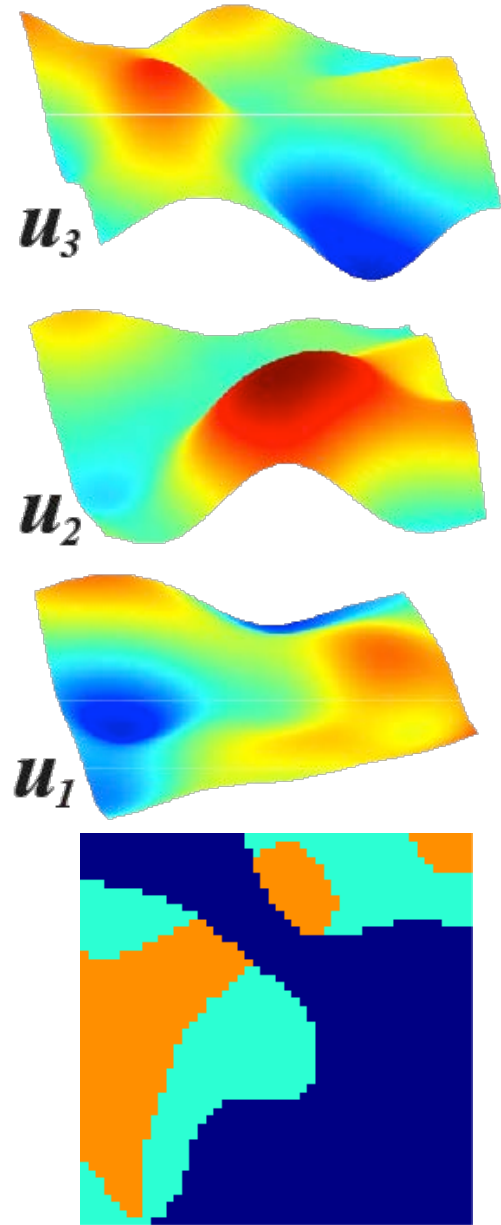


Spatially Dependent Pitman-Yor

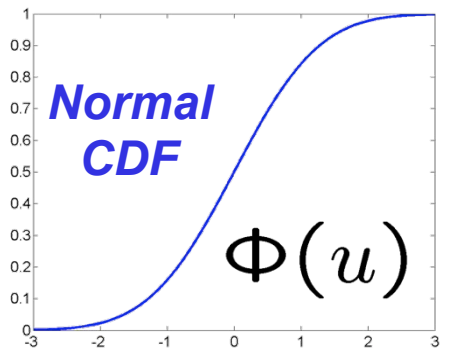


$$z_i = \min\{k \mid u_{ki} < \Phi^{-1}(v_k)\}$$

$$x_i \sim \text{Mult}(\theta_{z_i})$$

Non-Markov
Gaussian
Processes:
 $u_{ki} \sim \mathcal{N}(0, 1)$
 $u_{ki} \perp u_{li}$

PY prior:
Segment size
 $v_k \sim \text{Beta}(1 - a, b + ka)$



Feature
Assignments