Conditional Densities

1 Why

2 Definition

3 Notation

Let $f : \mathbf{R}^d \to \mathbf{R}$ a density. For $i, j = 1, \ldots, d$ and $i \neq j$, let $f_{i|j} : \mathbf{R}^2 \to \mathbf{R}$ satisfy

$$f_{ij}(\xi, \gamma) = f_{i|j}(\xi, \gamma) f_j(\gamma)$$

for $\xi, \gamma \in \mathbf{R}$.