

## MULTIVARIATE REAL DENSITIES

## Why

TODO

## Definition

A multivariate density or joint density is a function from n-dimensional real space to the real numbers which is nonnegative and and normalized. A real-valued function on n-dimensional real space is normalized if it integrates to 1.

## Notation

 $f: \mathbf{R}^d \to \mathbf{R}$  with  $f \geq 0$  and  $\int f = 1$  is a density.

