Borel Sigma Algebra

1 Why

We name and discuss the topological sigma algebra on R^d.

2 Definition

The **Borel sigma algebra** is the topological sigma algebra for R^d with the usual topology; we call its members the **Borel sets**.

3 Notation

We denote the Borel sigma algebra by $\mathcal{B}(R^d)$, or $\mathcal{B}(R)$ for the case of $d = 1$.