

## Topological Sigma Algebra

## Why

We often take the topology of a topological space as the generating set for the sigma algebra.

## Definition

Given a topological space, the  $topological\ sigma\ algebra$  is the sigma algebra generated by the topology.

## Notation

Let  $(A, \mathcal{T})$  be a topological space. We denote the topological sigma algebra by  $\sigma(\mathcal{T})$ .

