Tail Sigma Algebra

1 Why

2 Definition

The **tail sigma algebra** of a sequence of random variables is the sigma algebra which is the intersection of the sigma algebras of all final parts of the sequence.

2.1 Notation

Let $\{f_n\}_n$ be a sequence of random variables. Denote the tail sigma algebra by $T(\{f_n\}_n)$. We defined it as:

$$T(\{f_n\}_n) = \cap_{n=1}^{\infty} \sigma(\{X_{n+k}\}_k).$$