

## ALMOST SURE EVENTS

## Why

We discuss negligible sets in the langauge of probability theory.<sup>1</sup>

## **Definition**

Let  $(\Omega, \mathcal{A}, \mathbf{P})$  be a probability space. An event  $A \in \mathcal{A}$  happens almost surely (or almost certainly or almost always) if  $\mathbf{P}(A) = 1$  (equivalent, if  $\mathbf{P}(\Omega - A) = 0$ . Conversely, an event  $B \subset \Omega$  happens almost never if  $\mathbf{P}(B) = 0$ .

<sup>&</sup>lt;sup>1</sup>Future editions may modify this explanation.

