01

Theoretical foundations

Measurement is fundamental to science and technology. It may seem at first to be simple because it is familiar. A length, a duration, a mass—these types of quantities are the building blocks of our scientific conception of the world. To know their actuality in a given instance is the primary aim of measurement.

There are several manners in which philosophers, scientists, and other thinkers have tried to understand measurement. Rather than rushing ahead with our intuitive understanding, we will slow down and consider these theoretical foundations of measurement.¹

¹A great summary of the theories that follow can be found in Tal (2017).