

Analysing historical experiments with the replication method

Experiments have been considered for a long time as central to knowledge production in physics. From this perspective, it may seem remarkable that the historiography of science addressed the practical aspects of experiments only a few decades ago. Yet, since the 1980s, experimental practices as well as material aspects have received more attention.

In the presentation, I will discuss a particular approach towards experimental practices from the past: the replication method which aims at understanding practices through re-enacting these practices. In order to show the potential of this approach, the analysis of some canonical experiments from the history of physics will be discussed. In doing so, the educational potential of these case studies will also be sketched.