

Assessment 7

Interpretations of Scientific Knowledge

Note: For this assessment, you will refer to the previous reading, K. Kaneyuki and K. Scholberg's "Neutrino Oscillations."

Kaneyuki and Scholberg's article summarizes the story of the neutrino and the history of physicists' attempts to better understand this super-subatomic particle. Since the article reports not only on the theoretical properties of the neutrino but also on physicists' attempt to experiment on the neutrino, the article is relevant to examining scientists' attitudes about the proper interpretation of scientific knowledge.

Keeping in mind ideas from various philosophical interpretations of scientific knowledge (scientific realism—stubborn, entity, and structural; scientific antirealism—instrumentalist, constructive empiricist, and social constructivist), search Kaneyuki and Scholberg's article for evidence that they endorse one (or more) of these interpretations. Use this evidence to defend a thesis regarding Kaneyuki and Scholberg's attitude toward the interpretation of scientific knowledge about neutrinos. Then, in light of the readings from Unit 5, critically assess this attitude.

This assessment will take approximately two hours to complete.