

Abstract Submitted
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How can we teach ethics using a case study of the Thirty Meter Telescope?¹ ALEXANDER VASQUEZ, BRIANNE GUTMANN, DANIEL BARRINGER, ALICE OLMSTEAD, Texas State University, TEXAS STATE PER GROUP TEAM — It is important for STEM students to develop ethics knowledge. This is rarely taught in STEM classes and there are few instructional resources focused on ethics in STEM. We are incorporating ethics knowledge into curricular units for physics classes at Texas State University. Here, we focus on teaching about the ethics of building the Thirty Meter Telescope (TMT) in Hawaii for an observational astrophysics class. We developed ample resources for students to make informed decisions about this complex issue. The unit will encompass an introduction of the TMT, a local perspective in San Marcos, a history of Hawaii, and perspectives about the TMT relative to formal ethical frameworks. In Spring 2020, we will observe and video-record students' engagement with each other during this unit and collect their written work. We will analyze this data to better understand what worked well in our design and what could be improved. The results of our analysis can support the community of physics educators and education researchers in teaching about ethics in physics classes.

¹How can we teach ethics using a case study of the Thirty Meter Telescope?

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