
MAGIC

Science of the Cosmos

Contribution ID: 59

Type: **not specified**

How to Build a Telescope: Black Holes, Community Partnerships, and Environmental Ethics

Telescope siting has, historically, relied entirely upon ensuring sites meet the technical specifications required for observation including weather, atmospheric clarity, accessibility, and cost of developing the site. Astrophysicists have, however, obligations beyond merely the technical. As the field is becoming increasingly aware, telescopes exist within a broader social context, and the choice of site needs to be responsive to ethical, cultural and environmental specifications just as much as technical ones. We need look no further than the ongoing conflict surrounding the Thirty-Meter Telescope on Mauna Kea or the Square Kilometre Array in South Africa to see the importance of this lesson. In recognition of these challenges, the Next Generation Event Horizon Telescope (ngEHT) has founded an interdisciplinary Responsible Siting working group that is integrated into the site selection process. This talk will present a formal overview of the ethical challenges of telescope siting, as well as discuss the work being done by the responsible siting group for a proposed site in Wyoming where the ngEHT has been working with local tribes, governmental organisations, and the university of Wyoming to build mutually productive partnerships. This talk also looks and lessons we can learn from parallel fields including genetic modification, palaeontology, and conservation in order to advance a set of ethical best-practices for astronomy, and consider the fundamental philosophical challenges of building large-scale scientific experiments, particularly in areas of the world with a history of colonial, environmental, and scientific exploitation.

Author: THRESHER, Ann (Northeastern University)

Presenter: THRESHER, Ann (Northeastern University)