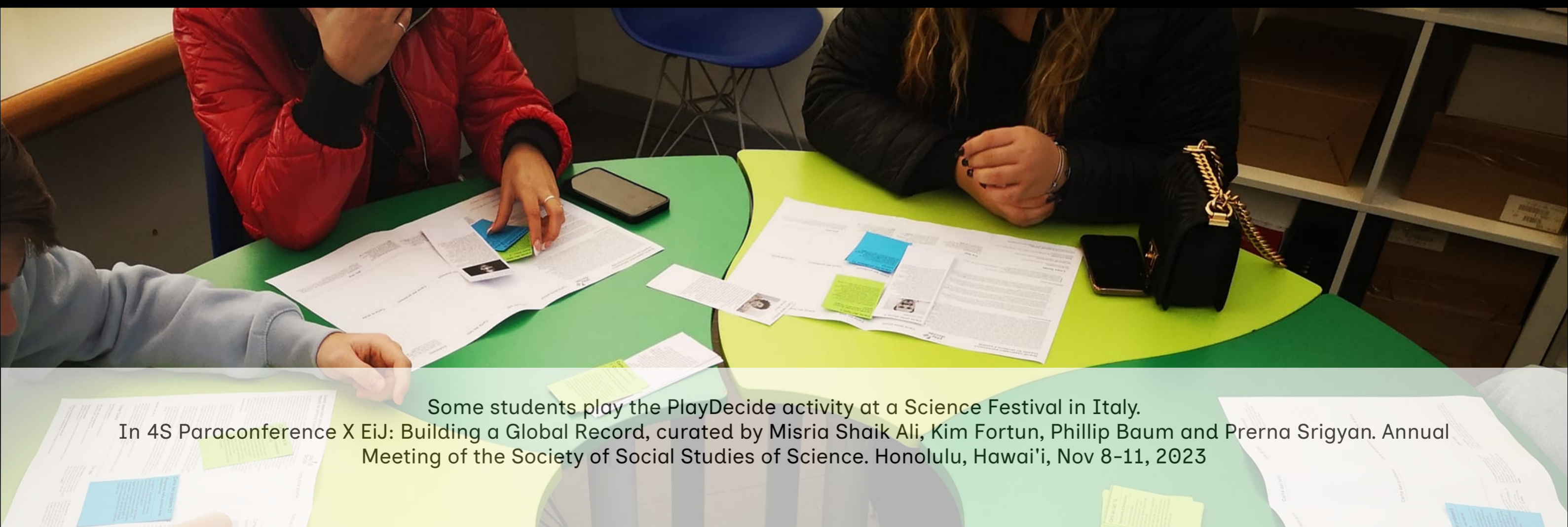


# What kinds of social, economic, discursive, spatial, technological and cultural forces silence and pull people away from environmental justice advocacy?

Astrophysics is a discipline that has a lot to do with environmental justice, even if it doesn't look like so. Astrophysics research nowadays involves both large cutting-edge infrastructures and a great number of people and institutions, usually at international level. Most of these projects require to be placed in very specific environments, which are not very common on our planet, to function in the best conditions. The territories chosen to host large facilities for astrophysics, as remote as they can be, are not empty. In most cases, they are inhabited (or regularly frequented) by people who are not always involved in the decision process and may see the construction as an invasion of lands they have owned or occupied for centuries. In this context, we believe that what pulls people away from environmental justice advocacy, especially those who do not live in or near these territories, is the lack of information and awareness about this topic, which may cause strongly polarized opinions and harshful discussions on the topic. To try to fill this gap, as science communicators we decided to develop a game-based activity which fosters the debate about this connection. Among our inspirations is the struggle of the protectors of Mauna a Wākea, on the Big Island of Hawai'i. The mountaintop is a sacred place for Native Hawaiians, who have been fighting to protect their ancestral land from the construction of the Thirty Meter Telescope (TMT). There are many other examples of large astronomical infrastructures and their impact on territories, including in our own country (Italy), some more virtuous than others, that show how the Astrophysics research world is strongly connected to environmental justice. For this activity, we chose the Creative Commons PlayDecide format, which aims to facilitate simple, respectful and fact-based group discussions. The game consists of a different set of cards containing facts about the topic, issues for different interest groups and personal stories of fictional individuals who are involved or affected by the topic. By telling the stories of different characters involved in this kind of situation, we aim to enlarge the debate, fostering the change of perspective of players. We wish that many people around the world download and use the game, either during public outreach activities with schools and the general public or as a self-awareness exercise within the astronomical community. The game does not refer to a specific facility, but we researched study cases related to astronomical observatories in sites such as Mauna a Wākea (Hawai'i), Kitt Peak and Mount Graham (Arizona), the Sardinia Radio Telescope in Italy as well as ongoing projects such as the SKA Observatory in South Africa and Australia. In particular, for the story cards, we strived to provide a balance in terms of gender and affected communities, trying as much as we could to avoid stereotypes, in the awareness that we, as the authors of the activity, are a group of white, female astronomers from a G7 country.

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Europe



Some students play the PlayDecide activity at a Science Festival in Italy.  
In 4S Paraconference X EiJ: Building a Global Record, curated by Misria Shaik Ali, Kim Fortun, Phillip Baum and Prerna Srigrayan. Annual Meeting of the Society of Social Studies of Science. Honolulu, Hawai'i, Nov 8-11, 2023



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