

## Cultural Astronomy

A scientific frame to understand academic astronomy as part of the Social World

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In the past, Western academic astronomy has been a discipline that has conceived in a very specific way the scope of its interests. But, in recent decades there has been a promising openness to the rest of the society, in the context of areas such as education, heritage and outreach. The IAU 2020 and 2030 Strategic Plans have reflected that opening movement. Despite this, as I have indicated in previous works (López2016, 2018a, 2018b), there has not been an adequate scientific approach that accompanies this opening, which would imply taking into account and incorporating the knowledge of the social sciences. In fact, it is not just about including this knowledge, but also about building a truly interdisciplinary perspective that incorporates them and combines them with academic astronomical knowledge.

In this presentation we want to develop the idea that this interdisciplinary approach to astronomy in its link with the rest of the social world already exists and is called cultural astronomy. Cultural astronomy is an interdisciplinary field with ancient roots that has established itself with such name since the 1990s (Iwaniszewski 1991; Ruggles& Saunders, 1993). It is defined as the study of knowledge and practices about the sky understood as a socio-cultural product and in fact the IAU has supported it for decades. But unfortunately in the context of academic astronomy in general it has been understood in a restricted way. Usually it is only seen as a study of the "astronomies of others", intended as previous stages or failed attempts of Western academic astronomy. From that point of view, its impact on the academic astronomical community has been limited, marked by prejudice and restricted to a minority and anecdotal space. It has only gained some recent general relevance in relation to the idea of astronomical heritage. In addition, many academic astronomers approach cultural astronomy without an adequate interdisciplinary perspective, especially with a marked lack of relationship with the field of social sciences, its debates and methods. All this has prevented its potential to be adequately exploited to become a frame of reference for thinking about the academic astronomy itself as a socio-cultural product and in relation to other knowledge systems and other aspects of social life. In this presentation we will seek to show that potential. We will analyze how cultural astronomy is the appropriate scientific framework to think about the relationships that are in the roots of the education and popularization of science initiatives, development projects, outreach activities, etc. We will also seek to show that cultural astronomy, as a critical reflection on the social conditions of astronomical knowledge production, has enormous potential to allow academic astronomy to manage its relationships and conflicts with other instances of the diverse societies of the World.

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