

47th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) –
The Next Steps (A4)
SETI 2: SETI and Society (2)

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WHAT COUNTS AS ‘EXTRAORDINARY EVIDENCE’? SETI BETWEEN ENTHUSIASM AND
SCEPTICISM

Abstract

“Extraordinary claims require extraordinary evidence” has become one of Sagan’s most popular mottoes. The phrase draws attention on two key aspects of SETI - as well as astrobiological - research: the exceptionality of a purported discovery and the complexity of the determination of what counts as valid, legitimate and reliable evidence of extra-terrestrial life. The creation and endorsement of a number of research methods and post-detection protocols aim to an efficient management of both the enthusiasm and the scepticism inherent to the search for extra-terrestrial life.

Post-detection procedures, from evidence checking to the attribution of a Rio Scale value, ultimately address problems that have to do with the social nature of the scientific community and the necessary cooperation with other communities (such as the media, different kinds of public etc.). By drawing on the STS (Science and Technology Studies) literature on issues such as *trust*, *evidence*, and *communication*, I explore some of the social issues that the SETI community will have to confront in case of a signal detection, and the social assumptions embedded in the use of numerical scales (such as the Rio scale, the London Scale and the San Marino scale) to vehicle the complexity of such an event.