

43rd SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The
Next Steps (A4)
SETI 1: SETI Science and Technology (1)

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ADDRESSING SOCIETAL CONCERNS IN ACTIVE SETI

Abstract

Significant concerns have been raised arguing against actively broadcasting a SETI message over concerns that we invite aggression by more-advanced extraterrestrial species. Arguments in favor of active SETI maintain that more-advanced species would necessarily be friendly, or at least the distances involved would preclude hostile acts. Neither position has data in support. This paper addresses the technical concerns over active SETI, specifically revealing our location and environmental requirements by Doppler shift of the active SETI signal to imply it comes from a planet in a different orbit or orbiting a different star. Intentional degradation of the signal to simulate greater interstellar distances is also possible. Adjustment of the content of the message can imply a different planet of origin or different environmental requirements. Of course, this mechanism can be considered lying or at least misleading to the recipient, which undermines the reason for communication in the first place. It also provides a caveat to participants in SETI message decoding: ET may be doing the same to us.