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THE NUMBER OF ET CIVILIZATIONS AND THE "REVERSE SETI" ARGUMENT

Abstract

As a matter of fact, until now no extraterrestrial signal has been detected by our radiotelescopes. Usually this fact has been explained with the limitations of our instruments, which are still far from technological perfection. But what if we consider the matter from the point of view of ETs, as possibly doing SETI to detect us? Since we think to be able in few decades to detect habitable planet in a range of some tens of light years, by using interpherometric techniques, it follows that even a civilization only one hundred year more advanced than us, existing into this range, should have recognized the Earth as a habitable planet at least at the time of our first powerful transmission (inauguration of the Olympic Games of Berlin, 1936). So, why nobody has yet tried to communicate with us? In the present paper I'll examine the implications of this fact for the problem, crucial for SETI, of the possible existence of other civilizations on the planets orbiting the most nearby stars, then trying to extend the argument to an evaluation of the maximum possible number of extraterrestrial communicating civilizations in the Galaxy.