

50th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) –
The Next Steps (A4)
SETI 1: SETI Science and Technology (1)

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THE DRAKE EQUATION AND SETI IN THE JWST ERA

Abstract

We apply our earlier analyses of SETI in the Kepler era (Wandel 2015; 2017) to the era when biosignature analyses by James Webb Space Telescope will provide a tool to identify biotic exoplanets within the Habitable Zone of M-dwarfs (IAC-21/A1/6). While eventual positive detections may give an estimate the abundance of biotic exoplanets and the biological parameter in the Drake equation, they can also be the target of deeper and prolonged listening, as well as active messaging. On the more philosophical side, one can argue that such messaging procedures would be used by other civilizations to message at the biotic Earth, leading to a third-level Fermi paradox (the first level being the original one, "where are they all?", the second one - Fermi-SETI paradox; e.g. Wandel 2015). By analogy we may call it METI-Fermi paradox, and it could circumvent the Earth radiosphere explanation of the SETI-Fermi paradox.