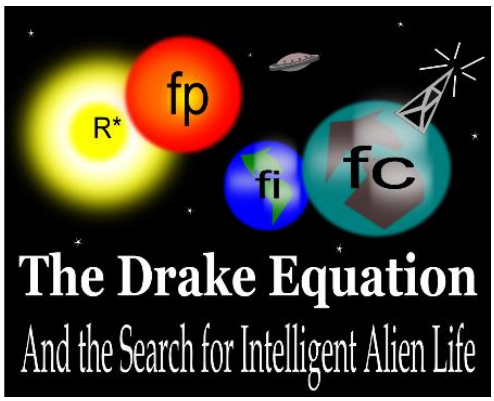
IEEE Southeastern Michigan

Presents:

The Drake Equation: A Documentary



IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Recently, as part of an innovative and fresh approach, i.e., a non-traditional meeting event: we presented video documentaries. This was very warmly received. So, we decided to continue the good work. We proudly present the documentary, *The Search for Life: The Drake Equation*

Summary: A look at the Drake equation, developed by Dr. Frank Drake as a way to think about the number of extraterrestrial civilizations in our galaxy that could exist and communicate with us

The Drake equation is:[1]

$$N = R_* \cdot f_\mathrm{p} \cdot n_\mathrm{e} \cdot f_\mathrm{l} \cdot f_\mathrm{i} \cdot f_\mathrm{c} \cdot L$$

where

- N = the number of civilizations in the Milky Way galaxy with which communication might be possible (i.e. which are on the current past light cone);

and

- R_* = the average rate of star formation in our Galaxy.
- f_p = the fraction of those stars that have planets.
- n_e = the average number of planets that can potentially support life per star that has planets.
- f_l = the fraction of planets that could support life that actually develop life at some point.
- f_i = the fraction of planets with life that go on to develop intelligent life (civilizations).
- f_c = the fraction of civilizations that develop a technology that releases detectable signs of their existence into space.
- L = the length of time for which such civilizations release detectable signals into space.[6][7]

At Glance

- When:
  Date: May 30th, 2025
  Time: 1800 – 1930 Hrs (EST/EDT)
- Where:
  Online via Webex (to be shared only after you have a confirmed registration)
- Audience: OPEN to ALL*

Sponsored by IEEE SE Michigan Computer Society Chapter

***Pre-Registration Required!**

https://events.vtools.ieee.org/m/479751

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