

Dear Kelvin,

The lure of interstellar travel is enormous – but unfortunately not as large as space itself. Space is too big and our lives too short for any practical interstellar travel by humans. Even for robotic craft the advancing technologies of remote sensing, artificial intelligence, virtual reality (using real data) and information processing, it seems likely that humankind and probably other life forms (if they exist) will find other ways of exploring different than trying to physically go from one star system to others.

The essential rationale and motive for space exploration is the human desire to explore themselves. By that I mean to understand the origin, evolution and destiny of life and our species relation to the physical forces and processes of the Universe. A philosopher might call that the search for the meaning of life – but I am not a philosopher. It is my conclusion, based on 60 years of engagement in planetary exploration and projects related to the search for life on other worlds that we can tentatively make two conclusions to guide us in future exploration: (1) the Universe is likely teeming with life on millions, perhaps billions of other worlds – simple life; (2) that intelligent (complex, civilization-forming, technologically developing, self-aware, communicating) life is, at best, rare – likely non-existent in our galaxy. While one can never prove a negative in science and therefore we can't ever prove there is no intelligent life out there, we can cite lots of evidence and accumulating data to suggest it. However, with so many worlds with so many possibilities for life on them, I believe that we have many centuries of exciting interstellar exploration ahead of us (by remote means as mentioned above) to delve into those key questions for understanding life in the Universe and understanding our place in the cosmic scheme of things.

Carl Sagan, Bruce Murray and I formed The Planetary Society with a vision: “To explore new worlds and seek other life.” During those years it was my privilege to work with giants in this quest: Asimov, Clarke, Drake, Dyson, Forward, Hawking, Kardashev, Morrison, Shklovsky, to name a few. After all this, my answer to your question, “what is the most important needed interstellar technology,” is artificial intelligence and information processing. We won't go there – we'll bring it here.

With every good wish,

Louis Friedman

Executive Director Emeritus and Co-Founder

The Planetary Society