# DR. SETI'S STARS

Searching For The Ultimate DX

## The Bet is Already Won

n our last column in the Spring 2009 issue of CQ VHF, we introduced Long Bets (www.longbets.org), the Arena for Accountable Predictions, a webbased wagering facility launched by the futures-oriented Long Now Foundation. The purpose of Long Bets is to improve long-term thinking. You may recall that Long Bets is a public arena for enjoyably competitive predictions, of interest to society, with philanthropic money at stake. As mentioned in that column, I am a party to one of those bets-and so, it turns out, are a couple of my colleagues.

Their wager is intriguing. It was proposed by Tibor Pacher, who runs the Peregrinus Interstellar website, and the challenge was accepted by Paul Gilster of Centauri Dreams. Since both parties to the wager are friends of The SETI League, I felt compelled to follow the debate closely.

The bet in question, as posted by Pacher, reads: "The first true interstellar mission, targeted at the star closest to the sun or even farther, will be launched before or on December 6, 2025 and will be widely supported by the public."

The conditions to be satisfied in winning this bet are quite specific:

1. The mission can be a manned or unmanned flyby probe or to be captured by the target star's gravitational field. It will have been designed expressly as a mission to another star, and not an outersolar-system mission that keeps going.

2. Allowed launch location of the spacecraft is any place in the solar system within the orbit of Neptune, either from the surface of a solar system body or from any orbital position.

3. As a minimum requirement for the mission the spacecraft shall be capable of delivering data for at least one scientific measurement.

4. Planned mission duration shall be less than 2,000 years.

Gilster is arguing against Pacher's prediction, but it seems to me that the bet has

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already been won. I would argue that the first interstellar missions have already launched and that (exercising only a little imagination) they meet the above conditions. Those missions involve not spacecraft, but rather streams of photons, the fastest spaceships known to man.

Think about it: Interstellar microwave transmissions probe other civilizations' interest in dialog and pass numerous stars, and thus are "flyby probes," in a sense. They are transmitted specifically for the purpose of reaching other solar systems. They have been "launched" (transmitted) several times from Earth, which is clearly within the 4.5-billion km radius of Neptune's orbit. Some of these transmissions have conveyed scientific information about Earth, which satisfies the condition that they "deliver data for at least one scientific measurement." They travel at the speed of light, so within the 2,000year mission duration they potentially will reach thousands of stars within 2,000 light years of our own sun. Also, they are widely supported by the public, as witnessed by the large number of humans who have submitted messages to the various projects that beam them into space. Thus, congratulations, Tibor, you win!

Nevertheless, Tibor and Paul agree that what they had in mind is slightly larger interstellar probes. They also had intended provision #3 to require the delivery of scientific data to, not from, Earth, although they failed to state this clearly in their wager. Thus, honoring the spirit (if not the language) of the bet, I guess we'll have to wait a little longer to see whose position prevails.

Meanwhile, as a side bet, Tibor and Paul have agreed that the loser will buy the winner a beer, probably in Budapest (Tibor's native town, and a favorite venue of Paul's and mine), once the bet is decided. They've invited me to join them there on December 6, 2025, win or lose. Since I hope still to be drinking beer into my eighties, I look forward to doing so, and to reporting the outcome of this wager in Volume 28, Issue No. 1 of CQ VHF. So, don't let your subscription lapse!

73, Paul, N6TX

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