## The Arthur C. Clarke 2018 Innovation Award

**Jill Tarter** 

Jill Tarter earned a Bachelor of Engineering Physics degree as an undergraduate at Cornell University and as the only woman in the engineering program. Her professional interest in astronomy emerged as she pursued a Master's degree and Ph.D. at the University of California at Berkeley. It was in her Ph.D. thesis where she coined the term "brown dwarf" while researching small-mass objects that fail to stably fuse hydrogen.



Tarter has worked on a number of major scientific projects, most relating to the search for extraterrestrial life. As a graduate student, she was inspired to do SETI research by the Cyclops Report. Stuart Bowyer gave her the report to read when Bowyer discovered that Tarter could program the thenoutdated PDP-8/S computer for Bowyer's SETI project at Hat Creek Radio Observatory. She worked with Bowyer on the radio-search project SERENDIP and created the corresponding backronym, "Search for Extraterrestrial Radio Emissions from Nearby Developed Intelligent Populations". She was project scientist for NASA's High Resolution Microwave Survey (HRMS) in 1992 and 1993 and subsequently director of Project Phoenix (HRMS reconfigured) under the auspices of the SETI Institute. She was co-creator with Margaret Turnbull of the HabCat in 2002. Tarter has published dozens of technical papers and lectures extensively both on the search for extraterrestrial intelligence and the need for proper science education. She had spent 35 years in the quest for extraterrestrial life when she announced her retirement in 2012.

On October 20, 2006, Tarter appeared on the Point of Inquiry podcast to discuss the question: "Are we alone?" Tarter stated, "Humans will have a different view about being human if and when we know the answer to the 'Are we alone?' guestion."

In 2011, Tarter delivered a talk "Intelligent Life in the Universe: Is Anybody Out There?" at the first Starmus Festival in the Canary Islands. The Festival blends astronomy, allied sciences, music, and art. Tarter subsequently joined the Starmus Board of Directors. Her 2011 talk was published in the book Starmus: 50 Years of Man in Space. Currently, Tarter is a member of the CuriosityStream Advisory Board.