

Nobel Laureate to speak at FLARC

Friday - March 15th - 7:00 pm

Fair Lawn NJ Senior Center

11-05 Gardiner Road

Fair Lawn NJ 07410

The 2019 FLARC (Fair Lawn Amateur Radio Club) Speaker Series is proud and excited to welcome Joe Taylor K1JT as our March guest speaker. Joe has used his amazing background as an astrophysicist, and his pulsar and other weak-signal intergalactic computer savvy, to create several new amateur radio modes of communication. These new digital modes have helped to compensate for the quite poor radio propagation conditions we have been having due to low sunspot activity - in turn, they have fostered an exciting new interest among ham radio enthusiasts.

Joe Taylor first obtained his amateur radio license as a teenager, which led him to the field of radio astronomy. Taylor is well known in the field of amateur radio weak signal communication and has been assigned the call sign K1JT by the Federal Communications Commission (FCC). He had previously held the call signs K2ITP, WA1LXQ, W1HFV, and VK2BJX (the latter in Australia). His Amateur Radio feats have included mounting an 'expedition' in April 2010 to use the Arecibo Radio Telescope to conduct moon-bounce with Amateurs around the world using voice, Morse code, and digital communications.

He is actively developing several computer programs and communications protocols, including WSJT ("Weak Signal/Joe Taylor"), a software package and protocol suite that utilizes computer-generated messages in conjunction with radio transceivers to communicate over long distances with other amateur radio operators. WSJT is useful for passing short messages via non-traditional radio communications methods, such as moon-bounce and meteor scatter and other low signal-to-noise ratio paths. It is also useful for extremely long-distance contacts using very low power transmissions.

The FT8 mode has become one of the most popular digital modes for ham radio in the recent couple of years. It has already been greatly enhanced, to make it useful for contests and DXpeditions. We'll learn from Joe what plans there are for the future of FT8 & the other WSJT-X weak signal digital modes.

Joseph Taylor Jr. K1JT (born March 29, 1941) is an American astrophysicist and Nobel Prize in Physics laureate for his discovery with Russell Alan Hulse of a "new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation."

Taylor was among the first group of MacArthur Fellows. He has served on many boards, committees, and panels, co-chairing the Decadal Panel of that produced the report Astronomy and Astrophysics in the New Millennium that established the United States's national priorities in astronomy and astrophysics for the period 2000-2010. He was a guest of honor in the 2009 International Physics Olympiad.

Honors and awards

Nobel Prize in Physics	(1993)
Karl Schwarzschild Medal	(1997)
Wolf Prize in Physics	(1992)
John J. Carty Award for the Advancement of Science of the National Academy of Sciences	(1991)
Albert Einstein Medal	(1991)
Magellanic Premium	(1990)
Tomalla Foundation Prize	(1987)
Henry Draper Medal of the National Academy of Sciences	(1985)
Fellow of the American Academy of Arts and Sciences	(1982)
Heineman Prize of the American Astronomical Society	(1980)



Contact:
Ed Efchak, Public Information Officer
eefchak@gmail.com
802-282-6700

March 2, 2019

**FOR IMMEDIATE RELEASE:
Nobel Laureate Joe Taylor K1JT Discusses "Beyond FT8"
At March 15th FLARC 2019 Speaker Series**

The FLARC 2019 Speaker Series is honored to have as its March speaker Joe Taylor K1JT who will speak on the topic "Beyond FT8."

The talk will be held on Friday, March 15 at 7PM at the Fair Lawn Senior Center, 11-05 Gardiner Road in Fair Lawn.

All are welcome and refreshments will be served.

Joe Taylor was first licensed as KN2ITP in 1954, and has since held call signs K2ITP, WA1LXQ, W1HFV, VK2BJX and K1JT. He was Professor of Astronomy at the University of Massachusetts from 1969 to 1981 and since then Professor of Physics at Princeton University, serving there also as Dean of the Faculty for six years and retiring in 2006.

He was awarded the Nobel Prize in Physics in 1993 for discovery of the first orbiting pulsar, leading to observations that established the existence of gravitational waves. After retirement he has been busy developing and enhancing digital protocols for weak-signal communication by Amateur Radio, including JT65, WSPR, and FT8. He chases DX from 160 meters through the microwave bands.

Joe's full autobiographical statement is on the Nobel Foundation web site:

<https://www.nobelprize.org/prizes/physics/1993/taylor/biographical/>

So save the date and come to the Fair Lawn Senior Center at 7PM on March 15th for a unique night of conversation and learning. Don't forget to mark this fascinating topic which has transformed amateur radio at the Senior Center on your calendar! For more information, please visit the club's website at www.fairlawnarc.org or call 201-791-3841.

###