

PIONEER AWARD:

Recognizes a major, lasting contribution in the field of interest of MTT-S, published in an archival journal, at least 20 years prior to the year of the award, by an individual or team of up to three (3). This year's recipient is Sander Weinreb.



Sander Weinreb

"In recognition of pioneering contributions and the publication of an efficient method for computer aided noise analysis of linear amplifier networks"

Sander Weinreb is presently a Principal Scientist at JPL and a Faculty Associate at Caltech. He received the B.S.E.E. and Ph.D. degrees from M.I.T. in 1958 and 1963 respectively. Most of his career has been in the administration or development of instrumentation in radio astronomy. From 1966 to 1988 he led the Electronic Division of National Radio Astronomy Observatory where he was responsible for the design of all electronics for the Very Large Array and all other telescopes operated by the observatory. In 1989 he joined the central research laboratory of Martin Marietta where he led the millimeter-wave integrated circuit design and test group until

1996. He has had interim teaching positions at UC Berkeley, U. of Virginia, and U. of Massachusetts before joining JPL and Caltech in 1999.

Dr. Weinreb's major accomplishments are the introduction of digital correlation techniques into radio astronomy, the discovery of the first cosmic molecular spectral line (OH) and the introduction of cryogenic transistor amplifiers to radio astronomy. He has over 150 publications, has served on many review and visiting committees, is a Life Fellow of the IEEE, and was the recipient of the both the 2008 Reber Medal and the 2010 Jansky Award for innovative lifetime contributions to radio astronomy. His current research activities are in the areas of cryogenic low noise amplifiers and decade bandwidth antenna feeds.