

Don and I were postdocs at NRAO in 1972 and have been close friends and kindred spirits ever since. At NRAO our research did not overlap much, but I remember fun trips with Susan and Don. We met up again in 1975 when Don came to Berkeley.

Don was a pioneer. He has had several, overlapping careers. Interstellar medium, pulsars, VLBI, and Epoch of Re-ionization, and probably more that I don't know about, for Don's interests and collaborations were broad. In each field of research, Don developed new instrumentation and techniques to explore fundamental properties of our universe. He was excited by challenging puzzles. One famous puzzle led to the discovery of the first millisecond pulsar.

Don was fun to work with. He had the capacity to work very hard, but with a wry sense of humor, and sense a of adventure that made it fun

for those working with him. Don got great satisfaction from building observatories and making observations from scratch.

Deserts in the Australian outback, the Karoo in South Africa, and a meadow in West Virginia were his canvas.

Don played a major role in the formation and operation of the US VLBI Network, which started around 1976 and lasted until the commissioning of the VLBA in the early 1990s. Don served as its director for several years and compiled the VLBI Network Users handbook. – which roughly translates as ”How to run simultaneous observations across the world at several very different observatories, each with their own operating systems and idiosyncrasies”

I remember the early days of millimeter VLBI at Hat Creek. Don, in typical fashion, corralled Dick Plambeck and myself to help link up mil-

limeter wavelength telescopes around the USA, and later around the world to make a radio telescope with a resolution of 50 millionths of an arcsecond, about the size of a flea in Australia, or an accretion disk around the black hole in our Galactic center. A millimeter VLBI experiment was a heroic effort in 1983, using borrowed equipment which we assembled and installed at the telescopes. Don pulled together the logistic and technical support to make these observations possible. We always got fringes, which lead to measuring the nature and structure of the 4 million solar mass black hole in our Galactic center, and the billion solar mass black holes that power quasars.

I remember when Don passed the millimeter VLBI baton over to me in my office in 1985. It was time for Don to move on and focus on other puzzles. I then organized the millimeter VLBI for the next 5 years, and only then really appreciated the incredible effort that Don had put in to

make these experiments possible. This was another great gift that Don had; to wean his collaborators from his protective leadership; to hand over the reins when it was time for him to move on and break new ground.

The new ground was a meadow in West Virginia. Don was going to measure the structure of the early universe using a few dipoles set up in a meadow in West Virginia. He was doing this at 150 MHz trying to detect cosmic whispers in the middle of a communications super highway. He was doing this from a laptop in his office over a modem to West Virginia. I was in his office when he detected fringes from the sun, the brightest radio source in the sky, millions of times brighter than the signal he was looking for. I was very sceptical but was drawn in. Don's enthusiasm and energy were contagious. With collaborators and students around the world he has put together the PAPER project which will answer fundamental questions about the structure of the universe.

Don was a great scientist, an inspiring leader, a wonderful colleague, and close friend. I will miss him greatly.