

Ronald Aaron (1936-2020)

Died from Covid-19

Maggie and I came to know the Aaron family from their frequent summer visits to Los Alamos, beginning around 1968 or so. Ronnie came to work with people in Theoretical Division, originally with Jim Young, then later with me and still later with Leon Heller.

Ronnie had an important collaboration with Jim and Ralph Amado, who was also a frequent T-Division visitor. (If I recall correctly, Ralph was Ronnie's thesis advisor at the University of Pennsylvania.) The major paper, which became known as "AAY", was a three-body calculation of pion-nucleon scattering. An important ingredient was an attractive force coming from a box diagram involving an intermediate rho-meson.

An off-shoot of AAY was the only paper that I ever co-authored with Ronnie. It came about when I idly asked him one day what would happen if the incoming pion was instead a strange meson called a kaon. Hey, he said, I can do that with our Fortran code with only some minor changes! This led to our Phys. Rev. Letters paper, "Theoretical Evidence for Z-star Mesons", which we claimed would be found in K^+ - proton scattering. At the time, we thought this was a pretty solid prediction of a new short-lived meson resonance.

Unfortunately, experimentalists never found any such Z-star resonances. Our paper was soon forgotten. However, I very recently learned from Research Gate that it has, in the last week or so, been read by two persons! Maybe this is an unexpected result of Ronnie's passing?

Enough about our physics together. I'm not sure I remember this correctly and what year it was, but Ronnie once came to T-Division for a sabbatical year or a semester. The family arrived and moved into a rental unit on a relatively chilly day. (Recall that Los Alamos is 7000 feet above sea level.) And their house was also relatively chilly. So, sometime late in the evening, we got a phonecall from Ronnie, asking if we could bring over some firewood for their fireplace. That is something we didn't have, but by sneaking next door and stealing from our neighbor's woodpile, we were able to deliver enough to temporarily solve their heating problem.

Besides interactions in Los Alamos, we have also visited and stayed with the Aarons several times in Boston and Newton, seeing them for the last time in October, 2005.

Richard R. Silbar, May 2020