

The idea of an amateur neutrino telescope came naturally when I noticed that a small commercial drum of cleaning fluid would fit neatly between the arms of my Celestron 14's old fork mounting. I temporarily removed the liquid, then lined the drum with aluminized plastic film from a hobby shop, using 30-minute epoxy to achieve a smooth bond which the cleaning fluid would not dissolve. I left space at the center of one end of the tube for a two-inch eyepiece adapter: Because of the metallized surface, photons generated by neutrino interaction have no other way to leave the drum, so I get to see them all. I omitted a star diagonal, since my intended target list would mostly require looking down.

The C-14 mount handled the fluid-filled drum with no trouble, though I had one unfortunate experience before I thought to reverse the wedge on its custom pier, so that one leg extended north, underneath the weight of the telescope. First light was with an object still above the horizon but rapidly setting -- Omega Centauri -- and how fascinating to watch as the great globular cluster dwindled through trees, then vanished entirely to the naked eye, below the distant ridges, yet remained undiminished in the view through the main eyepiece.

Thus encouraged, I sought more southerly targets. I had difficulty finding the Magellanic clouds at first, probably due to my lack of familiarity with setting circles, for I have always preferred to star hop -- undoubtedly there is a neutrino-sensitive finder in this instrument's future. In any case, once found, the our neighbor galaxies were a wonderful sight, full of rich detail, with many clusters and nebulae.

Slowly I worked my way back toward familiar sky, sampling the many celestial showpieces of the southern heavens that I had never seen before because of my north-latitude observing locations. I finished with a look at the Milky Way near the Scorpio-Sagittarius boundary, which was cheating a little, because this area was already peeping above the horizon. Yet I did not want to miss the opportunity to peer through the intervening clouds of dust and gas for a good view of the black hole and associated structures that lie at our galaxy's core. All very nice, and I think there is another satellite galaxy of the Milky Way on the far side, but I will have to do a visual observation with one of my other telescopes -- perhaps Refractor Red -- to confirm it.

All too soon it was time to pack up. I did so regretfully, for there are many wonders of the universe which can only be seen with a neutrino telescope such as I have described. Unfortunately, the opportunity to report to you about this one comes but once a year...

