In part four of How I Do What I Do, I will discuss concurrence.

According to Webster's Online dictionary, **con·cur·rence** Function: *noun* **1.** the simultaneous occurrence of events or circumstances

What does this have to do with anything in astronomy?

The diversity of Astronomical League Observing Programs is such that you can work on several at the same time, hence concurrence.

Say you are working on observing the Messier objects to receive the Messier Observing Club award. Consider doing the Messier Binocular Observing Club at the same time. Either find the Messier object first in the binoculars and then the telescope or the other way around. In either event, you can log the one object for both programs with very little additional effort.

So you are working on the Messier telescopic and binocular programs during the new moon weekends. Consider working on the Lunar Observing Club program during the time that the moon is up and Messier objects disappear. The nice thing about the Lunar and Lunar II clubs is that you can do them from your driveway. The Lunar II club has some sketching involved and this is very easy to do with the porch light on. I find sketching much easier to do in white light than red light, held between my teeth.

And if you like sketching with the porch light on, try sketching in broad daylight. The Sun Spotters Observing Club deals with observing the Sun and making sketches of what you see there. I found this program very enjoyable.

Another program you can do from your driveway is the Planetary Observers Observing Club. This club deals with solar system objects and it too was a fun program to do. This club is not dependent on the moon phase, as are deep sky object clubs.

And if you have wondered about all those man-made satellites passing overhead all the time, the Earth Observing Satellite Observing Club can also be done from your driveway. And when I say driveway, I mean at your home whether that be your front or back yard.

And, if that's not enough for you to do from your yard, check out the Urban Observing Club. Even though this club sounds simple, it is not a novice club. It's hard to find reference stars in the city to help locate the places in the sky where these objects lurk. But once you have completed the Messier Observing Club, consider tackling this one. It too has its rewards from the mere fact of what CAN be seen from your back yard.

Other programs that you can do concurrently, no matter what other programs you are doing are the Meteor and Comet Observing Clubs. I don't usually sit and devote a night to meteor watching, but each August I do. That is when I watch the Persieds streak across the sky. By taking note of a few aspects of each meteor you see, you can inch your way towards this certificate.

The Comet Observing Club I treat this club the same way. When I see a comet, I take note of its characteristics, as outlined by the requirements of this club. Some day, I will have seen enough comets to get this award. To date, I have seen 9 comets, the last being Comet Pojmanksi I logged a couple of weeks ago. You need 12 to get the silver certificate and 18 to get the gold certificate. This May, there are a string of 3 comets passing near the Earth. I have been told by the club coordinator that if you observe all 3 fragments, it will count as 3 separate comet observations.

Then there is the issue of object overlap. This occurs when you have a program like the Messier and Globular Cluster Observing Clubs. If you take 1 more minute when observing a globular cluster of the Messier Club and give it a concentration class, you have logged about two-thirds of the objects needed to receive the Globular Cluster Observing Club certificate once you finish the Messier Observing Club.

If you choose to do some of your Messier Club observing from your yard, you could also log these observations towards the Urban Observing Club.

So, with a little bit of preplanning, you can be working on several programs at the same time. I like working on many programs at once, for if I become bored with looking at faint galaxies (the Herschel II Program), I can switch to Open Clusters and Planetary Nebulas. It's this mix that I like.

## Concurrence.

Have you noticed that the Astronomical League has a new program. The Outreach Program. For those of you that do star parties and other public outreach events, the new program give you some recognition for the volunteer work that you do. There are three levels of achievement with this new program. Again, keeping track of what you do, over time, will give you what you need to receive these certificates.

You can read about the a description of the new program and its requirements by visiting the web site <u>http://www.astroleague.org/al/obsclubs/outreach/outreach.html</u>.