

Eric Merlo (contact me through Meredith)

1. **New topic this year—Galaxies (variable stars no longer the main topic).**

**Make sure the kids read the rules!!! Don't study the wrong stuff.**

**Emphasis on "Normal" Galaxies and "Starburst" galaxies, and their characteristics, structure, components and the processes that make them what they are. Start with the Milky Way.**

**The listed deep sky objects are carefully chosen and are either representative of their types, or illustrate something "special" about them. Use them to help guide the kids' study.**

**Some holdovers from last year—Cepheids and RR Lyra, X-ray binary, supernovae and Epsilon Aurigae. These are all variable stars, but kids should look for their connections to galaxies.**

**Basic knowledge of stellar evolution, HR diagrams, magnitude scales and the distance ladder is essential.**

**All concepts related to the listed objects and their types are fair game, but I will not add any objects .**

**Don't forget the history of galactic astronomy. How did we get to where we are?**

2. **The event will be a test, there will be no stations. No moving around. Multiple choice, identification, short answer and calculations. Tie-breaker questions will be identified.**

**A graphing calculator is not essential: a scientific calculator will be adequate for all calculations. Bring one.**

**Resources: Laptop or binder, not both. No Internet. Bring pencils—and a sharpener. Work quietly.**

3. **You can get the coach's clinic ppt off the tuft's site for free. The SOINC CD is good, but not essential.**

**AAVSO not that helpful this year. Look at the Chandra, Spitzer, and Hubble sites.**

**Search the internet for websites, articles and college astronomy courses related to the objects and galaxies.**