

Cache Valley Clear Skies

The Journal of the Cache Valley Astronomical Society



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Meeting Announcement

Our monthly meeting will be held on Wednesday, February 17, 2016 at 7:00pm in the Bonneville Room at the Logan Library.

Our featured speaker will be club member Tom Westre. Tom will be discussing searching for exoplanets and Earth 2.0.

Since the discovery of the first planet orbiting another star in 1995, astronomers have found over one thousand additional planets. We are on the verge of finding another earth orbiting another star possibly in the habitable zone where water is liquid.

Tom will discuss the efforts to uncover distant planets and what may lie in store for finding another earth. This is one of astronomy's most exciting adventures. He will also discuss how amateurs can take part in this search.

The President's Corner By Dell Vance, CVAS President

As we move into a new year we are anxious to reach out to other people that are interested in astronomy, especially if they don't know that yet. Many times as I am talking to people I ask them if they like to



look at the stars and planets. Most people are interested in that.

Part of our CVAS Constitution pertains to us being the "GO-TO-ORGANIZATION" when people are thinking about Astronomy. We can potentially provide a great service to groups, particularly youth groups that would like to have experience in observing the stars. There are more opportunities than we can currently support. As such we are trying to get a feel for what you the members would like to support in this effort.

- Maybe it is helping with a public star party a couple of times a year.
- Maybe helping with a star party for a small group, i.e. Boy Scout, Young Women, etc.
- Maybe you would be willing to participate in a presentation at a school or library.
- Maybe become an Astronomy Merit Badge Counselor for the Boy Scouts.

Whatever level of participation you are willing to provide we would like to know that so we can make plans to serve the community as an organization. We have a couple of simple questions on the email that this Newsletter is attached to. Please take a moment to answer those two question and reply them back to the sender of the newsletter (Dale Hooper). We will base our plans on the response that we get.

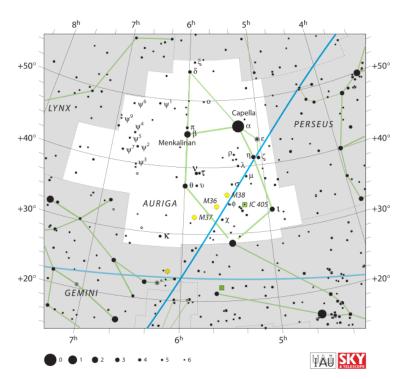
We had a great meeting on January 20th at the Logan Library (our new meeting location). Dale did a great job of working us through the process of how the Hubble Constant was developed. We are also looking forward to Tom Westre's presentation this month, Februray 17th at 7:00 PM, on the potential of life in the universe. Again the meeting will be at the Logan Library. Hope to see you there.

Clear Skies!

Spotlight on Auriga, the Charioteer By Dale Hooper

Auriga is home to the first magnitude star Capella, several bright open clusters, several nice multiple stars and a few good dark nebulae.

I am listing objects which rate at least four stars in *The Night Sky Observer's Guide* (Auriga is in Volume 1). As usual, the table is organized according to increasing Right Ascension values.



IAU and Sky & Tel - Roger Sinnott & Rick Fienberg

Object	R.A.	Dec.
Barnard 26-28 (Dark nebula)	04h55.2m	+30°35'
4 Aurigae (Double star)	04h59.3m	+37°53'
5 Aurigae (Double star)	05h00.3m	+39°24'
Barnard 29 (Dark nebula)	05h06.2m	+31°44'
Σ644 (Double star)	05h10.3m	+37°18'
Σ653 (Triple star)	05h15.4m	+32°31'
AE Aurigae (Variable star)	05h16.3m	+34°19'
NGC 1857 (Open cluster)	05h20.2m	+39°21'
UV Aurigae (Var & Dbl star)	05h21.8m	+32°31'
Σ698 (Double star)	05h25.2m	+34°51'
NGC 1907 (Open cluster)	05h28.0m	+35°19'
Messier 38 (Open cluster)	05h28.7m	+35°50'
Messier 36 (Open cluster)	05h36.1m	+34°08'
26 Aurigae (Double star)	05h38.6m	+30°30'
Barnard 34 (Dark nebula)	05h43.5m	+32°40'
Messier 37 (Open cluster)	05h52.4m	+32°33'
37 Aurigae (Double star)	05h59.7m	+37°13'
$\Sigma 845$ (Double star)	06h11.6m	+48°43'
RT Aurigae (Variable star)	06h28.6m	+30°30'
Σ872 (Double star)	06h15.6m	+36°09'
OΣ147 (Quadruple star)	06h34.3m	+38°05'
Σ928 (Double star)	06h34.7m	+38°32'
Σ929 (Double star)	06h35.4m	+37°43'
56 Aurigae (Double star)	06h46.7m	+43°35'

CVAS Minutes – January 2015

The meeting was held at our new location of the Bonneville Room in the Logan Library.

Club member Dale Hooper was our speaker. Club members in attendance were first able to measure the redshifts (z values) for five different galaxies. From this value they were then able to determine the recession velocity for these galaxies. The members next used images of the five galaxies to determine an estimate of the distances to these galaxies.

Using the recession velocities and distances the members were then able to create a graph of recession velocity versus distance to get an estimate for the Hubble constant (H₀). Using our Hubble constant we were then able to compute a rough estimate for the size and age of the universe.

Upcoming Star Parties

Currently there are no organized club star parties planned for February.

Upcoming Events

1 Feb	Mars 3° south of the Moon
	Space shuttle Columbia disintegrates
	on re-entry (2003)
2 Feb	Groundhog Day
3 Feb	Luna 9 first craft to soft land on the
	Moon (1966)
4 Feb	Clyde Tombaugh born (1906)
6 Feb	Mercury at greatest western
	elongation (26°)
7 Feb	First untethered spacewalk, Bruce
	McCandless (1984)
8 Feb	New Moon
14 Feb	Valentine's Day
15 Feb	First Quarter Moon
	President's Day
16 Feb	Aldebaran 0.3° south of Moon
	Gerard Kuiper discovers Miranda,
	moon of Uranus (1948)
18 Feb	Clyde Tombaugh discovers Pluto
	(1930)
19 Feb	Nicolas Copernicus born (1473)

20 Feb	John Glenn first American in orbit
	(1962)
22 Feb	Full Moon
23 Feb	Moon passes 1.7° south of Jupiter
	Supernova 1987A explodes (1987)
24 Feb	Discovery of first pulsar (1968)