# **CONSTELLATION**

### An Official Publication of the Bucks-Mont Astronomical Association, Inc

**VOLUME 25, Issue No 4** 

October/November/December 2010

Scott Petersen and Chris Sommers, Editors

© BMAA, Inc. 2010





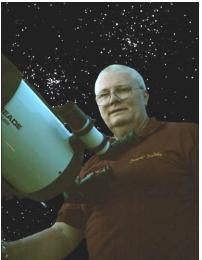




## Thank You BMAA!

- by Dwight Dulsky

About ten years ago I read about a partial solar eclipse that was going to occur on Christmas Day. I



thought this is the perfect excuse to finally fulfill a long time dream, to buy a "real" telescope. As a boy growing up in the 60's, the excitement of space exploration has always been present throughout my life. Now that my own children were entering their teenage years, I was finally getting a little bit more free time to try out some new things and amateur astronomy seemed an intriguing pastime. My first scope (which I still have), was an 8" Orion SkyView Deluxe reflector on an equatorial mount. That scope treated me to many sites and a decade long adventure that led to several more scopes and too many accessories to count.

In 2004, I discovered BMAA and thought I would go to one of their meetings and see what it was all about. I found a wonderful source of knowledge and friendly folks eager to share their talents with new comers. I learned the scope of this hobby is far and wide with so many areas to explore. I also learned that for any organization like BMAA to survive and thrive it needs and active membership willing to plan and organize our many events that take

place throughout the year. I also found a lot of satisfaction volunteering to help out with some of these activities. Outreach activities have always been an area I have been interested in, but along the way I found myself involved with Astronomy Day, StarWatches, Stella Della and of course being an officer with the club. All of these activities have been interesting endeavors.

But the one thing that has suffered is time for following my own astronomical pursuits. Over the years I have presented many topics at club meetings, but have had little time to explore them in depth. I hope that will all change in 2011 since leaving the leadership positions of the presidency and Stella Della Valley chairperson. I am very much looking forward to more free evenings out under the stars!

As the New Year rolls in, we welcome Chris Sommers as our new president. I have known Chris a long time and have great respect for his knowledge and passion about astronomy. Often when others are keeping warm inside, we'll get an observation report from Chris on his back deck enjoying some interesting winter celestial sight. As in any transition, I'm sure there will be some changes and I'm certain BMAA will continue to move forward in its mission of providing astronomy expertise to the residents of Bucks and Montgomery Counties. So join me in welcoming Chris Sommers as our new club president, we're looking forward to great things to come.

\* \* \* \* \* \* \*

## **Observing Notes From Vermont and Pennsylvania**

- by Robert Dudley

The observing weather in Vermont has been pretty miserable. Most evenings have usually been cloudy, or evening ground fog rapidly develops. Neither of these conditions is conducive to observing deep sky objects. Finally we had some decent viewing a couple of days before Stella Della and I took my scope out to do some observing. I headed towards Sagittarius and was able to grab both M-22 and M-28. Sagittarius was low in the sky and was barely above the hill. To make matters worse the lights from Albany, NY interfered with viewing any of the other deep sky objects in this constellation. At least I knew that I should have better luck at SDV

Another object on my list was M-103 in Cassiopeia. This is an interesting cluster as there are many small open clusters in this part of the galaxy and M-103 is not the most impressive one of the group. This object is also the last object in the original Messier Catalogue. Admiral Symth, in his 'Cycle of Celestial Objects', describes M-103 as fan shape group of stars. The cluster is 1° NE of Delta Cass. I could not find this object while observing from Vermont, the star field is very rich; however under slightly worse conditions of Stella Della I was finally able to observe the cluster.

A more interesting cluster, which is a little over 2<sup>0</sup> south of Delta Cass, NGC 457. This cluster goes by the Owl Cluster though David Levy would like to name it the Friendship Cluster. He contends that it is easy to confuse the Owl Cluster with the Owl Nebula (M-97). To him the cluster looks like a man with open arms greeting a friend. Today most people call this cluster the ET Cluster. The two prominent stars that are the eyes are the two components of the double star Phi Cassiopeiae. The exact distance to the stars is not known; it is estimated that they are between 1,000 and 4,000 light years away. They are not part of the star cluster which is roughly 10,000 light years away and resides in the Perseus arm of our galaxy.

It is a wonderful sight on a cool autumn evening.

\* \* \* \* \* \* \*

The *CONSTELLATION* is the official publication of the Bucks-Mont Astronomical Association, Inc, a 501(c)(3) non-profit organization incorporated in the Commonwealth of Pennsylvania and exists for the exchange of ideas, news, information and publicity among the BMAA membership, as well as the amateur astronomy community at large. The views expressed are not necessarily those of BMAA, but of the contributors and are edited to fit within the format and confines of the publication. Unsolicited articles relevant to astronomy are welcomed and may be submitted to the Editor. Reprints of articles, or complete issues of the *CONSTELLATION*, are available by contacting the Editor at the address listed below, and portions may be reproduced without permission, provided explicit acknowledgement is made and a copy of that publication is sent to the Editor. The contents of this publication, and its format (published hard copy or electronic) are copyright ©2010 BMAA, Inc.

Submission deadline for articles is the 15th of the month prior to publication.

SCOTT PETERSEN CONSTELLATION EDITOR WYCOMBE PA 18980-0333

constellation@bma2.org TEL: 215.598.8447

FAX: 215.598.8446



Photo by Phil Zollner

After several years of absolutely horrendous star party weather, we held our breath for a Stella Della weekend with fair skies. Early in the week the forecast predicted nice weekend weather — and we all know how reliable a long range forecast is! None the less we prepared Camp Onas for a weekend full of astronomical activity. BMAA volunteers swung in to action early Friday afternoon and we hoped for the best.



As it turned out, Stella Della 2010 had the best three days of clear nice weather in recent memory – a star gazer's dream. As the Sun set Friday evening the skies were clear and bright. The soft hum of axis motors and light chatter of excited astronomers set the stage for a great night of observing and astrophotography activities.

Saturday is always a full day of events in the Dining Hall beginning with our early morning

Astronomical Flea Market. At 10a we had the Badder Solar Film workshop with about 7 or 8 participants making solar filters for their scopes. Unfortunately the Sun wasn't in the mood to produce a few sunspots for us, but solar activity is decidedly up from the long solar minimum.

The ever popular "Speaker Program" began in the early afternoon with a great presentation by Dr Julia Plummer of Arcadia University. Her talk entitled "<u>Habitability in the solar system:</u> Where should we look for life and why?" was a lively discussion of the quest for the discovery of life beyond planet Earth.

- continued, next page -

Our very own BMAA member Preston Smith treated us to a presentation on his passion of "Collecting Vintage and Antique Telescopes". Preston's always interesting talks strike a chord with long time astronomers who cut their observing teeth on some of these oldies but goodies pieces of optical equipment.

Finally a veteran speaker at Stella Della, Dr Ken Kremer presented "<u>The Space Shuttle, The Space Station and What's Beyond for NASA</u>". Dr Kremer always has his hand on the pulse of what's going on at NASA. With our shuttle program winding down, Ken discussed what's next for out manned and unmanned space program.



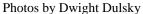




(left Dr. Julia Plummer, center Preston Smith, right Dr. Ken Kremer) Photos by Dwight Dulsky

Of course the Stella Della Valley tradition of doorprizes and an "all you can eat" Pizza Buffet rounded out the daytime activities of Saturday. Thanks to Cathy Ebert our doorprize coordinator, we had lots of nice doorprizes to give away at SDV2010. A lot of people walked away with some nice merchandise from our sponsors.









Thanks to these fine merchants who contributed to our doorprize locker: TeleVue, Questar, Lumicon International, ScopeCity, Marge's Monograms, Jim's Mobile Inc. (JMI), Bob's Knobs, Scientifics (formerly Edmund Scientifics), Sylvan Dell Publishing, Gene Chimahusky, Astrozap, Astrolaugh, Teeter's Telescopes and BMAA member sponsored prizes.



Photo by Phil Zollner

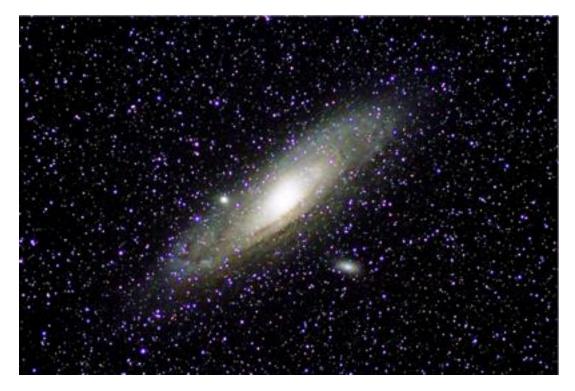
A smiling crescent Moon ushered in the Saturday night observing session. A repeat of clear skies brought on another long night of astronomical delights. Below are some great astrophotos taken from the field at SDV 2010.



Comet Hartley 2 Crusing past the Double Cluster

Photo by Brad Miller of BMAA

- continued, next page -



M31 by Brad Miller



M33 by Brad Miller

2010 marked the 24<sup>th</sup> annual Stella Della Valley Star Party. Come rain or shine my thanks go out to everyone who attended and helped out with this event. There are too many volunteers to name who always step up to the plate to make this a fun friendly fall tradition. Next year marks a milestone of 25 years, let's make it a special time for BMAA and astronomy in southeastern PA.

\* \* \* \* \* \* \*

# **On-Line Astronomy Resources**

- by Dwight Dulsky

It's early December and I'm sitting here locked up in my Pocono mountain cabin watching the snow flurries blow sideways across a very cold lake. Winter is still officially a few weeks away, but definitely on its way. Most of us pack the scopes away awaiting milder weather in the spring time. But, you don't have to shelve your astronomical enjoyment away completely. Thanks to the Internet a wealth of "virtual" observing is yours to be had. At the November 2010 BMAA meeting we highlighted on-line astronomy resources that you can enjoy till the spring thaw.

General Astronomy Websites: some sites require registration, but usually free for the entire site

- <u>Sky & Telescope</u> www.skyandtelescope.com Magazine and great observing resources also extra articles for subscribers
- Spaceweather.com www.spaceweather.com Sunspots / aurora / satellite flyovers
- <u>Cloudynights.com</u> www.cloudynights.com Equipment reviews and discussion forums
- <u>Heavens-above.com</u> www.heavens-above.com Resources for finding a variety of celestial objects manmade and natural
- Cal-Sky www.calsky.com (similar to Heavens-Above.com)
- <u>Clear Sky Charts / NOAA / Intellicast / BMAA</u> Weather related resources
- Nasa.gov Live TV direct from NASA

#### **Internet based Telescopes**

- Slooh.com www.slooh.com membership required a network of three telescopes in the Canary Islands, Chili and Australia you can log onto and have a live stream of the telescope image beamed right to your computer. Members can reserve "missions" to observe objects of interest. \*note, there have been many technological glitches in this program resulting in many delays at their various sites. The concept is terrific, but they are still working out the bugs.
- <u>Bradford Robotic Telescope</u> www.telescope.org (this is a free telescope located in the Canary Islands and sponsored by The University of Bradford in the UK.)
- <a href="http://www.global-rent-a-scope.com/">http://www.global-rent-a-scope.com/</a> Here you can rent a robotic controlled scope at a dark sky site. Each scope has a camera enabling you to capture images of your selected targets.
- <a href="http://www.nightskiesnetwork.com">http://www.nightskiesnetwork.com</a> On a clear dark night these amateurs invite you into their backyard observatories to share the view. After arriving at the site, scroll down and look for astronomers who are up and running (highlighted in red). You can end text messages to the astronomer who usually replies via voice. The quality and targets vary quite a bit as well as some patience as they get their equipment adjusted for these live streams of video from their place to yours. FREE and fun.
- <a href="http://www.jctobservatory.org">http://www.jctobservatory.org</a> This is a local astronomer in the southern part Bucks County who has quite a set up that also sends out live video when he's on line

- continued, next page -

#### Museums and other interesting places to visit

- <u>Johnsville Centrifuge and Science Museum</u> http://nadcmuseum.org/ open usually only a few hours on the weekend. Many early astronauts trained at Johnsville in the 1960's Street and Jacksonville roads in Warminster PA.
- <u>Franklin Institute</u> http://www2.fi.edu/ Fels Planetarium, Space area, rooftop observatory. Evening observing available one night per month in the warmer seasons
- The Horn Antenna NJ US Historical site of the famous antenna that discovered the cosmic back round radiation from the Big Bang. Located in Hopewell NJ. This site is not marked well and it may be a bit of an adventure trying to find it!
- Natural Science Museum NYC Hayden Planetarium
- National Air & Space Museum Washington DC
- Goddard Spaceflight Center Greenbelt MD a public visitors center
- <u>U.S. Naval Observatory</u> Washington DC Monthly public tours, requires reservations

\* \* \* \* \* \* \*