January 2018

Sponsored by the Santa Barbara Museum of Natural History

#### **ELECTION RESULTS**

Our hotly-contested elections are over, with little evidence of Russian meddling, according to FBI Special Agent Guido Parsec. The entire slate of 2016 officers and appointees has agreed to stay on in their current roles, including the new appointed position of Merch Manager, Pat McPartlin.

# THE JANUARY GENERAL MEETING

Our January speakers will be filmakers Harun Mehmedinovic and Gavin Heffernan, who will be presenting SKYGLOW; a hardcover photo book and timelapse video series exploring North America's remaining magnificent night skies and the grave threat of light pollution to our fragile environment. SKYGLOW explores the history and mythology of celestial observation, the proliferation of electrical outdoor lighting that spurred the rise of the phenomenon known as "skyglow," and the Dark Sky Movement that's fighting to reclaim the night skies.

# OUTREACH REPORT

Since the last newsletter, AU volunteers Krissie Cook, Tim Crawford, Art Harris, Pat & Chuck McPartlin, Janet & Martin Meza, Bonnie & Bruce Murdock, Edgar Ocampo, Peggy O'Rork, Javier Rivera, Tom Whittemore, and Jerry Wilson showed cool astro stuff to 537 visitors

# JANUARY OUTREACH

Here what's scheduled so far for January. Remember, events are subject to change, so to get the latest information on schedules, or directions, just contact Chuck at 964-8201 or <a href="macpuzl@west.net">macpuzl@west.net</a>

The Telescope Workshop meets on Tuesday evenings at 7:30 PM at the Broder Building at SBMNH. Contact Tim Crawford at <a href="mailto:terawf3@cox.net">terawf3@cox.net</a> for information. Listen to the AU on the radio at KZSB 1290 AM at 9 AM on the second and fourth Monday of each month.

# FRIDAY, JANUARY 5, 7 PM

Our first monthly meeting of the year in Farrand Hall at SBMNH.

# SATURDAY, JANUARY 13, 4 PM

Monthly AU planning meeting in the classroom outside Javier's office. Come help your club plan our activities for the coming year.

#### SATURDAY, JANUARY 13, 6 PM

Monthly SBMNH Star Party. Bring a scope, or just come out and mooch some views of the winter sky.

#### TUESDAY, JANUARY 16, 7 PM

Telescope Tuesday at the Camino Real Marketplace in Goleta. We set up in the plaza by the theater.

Third Tuesday of each month for 2018 \*\*\*

#### THURSDAY, JANUARY 18, SETUP 5:30 PM

Telescopes for Science Night at La Patera School, at 555 North La Patera Lane in Goleta. We set up on the playground grass, entering through a gate on the north side of the campus.

#### FRIDAY, JANUARY 19, SETUP 6 PM

Monthly Westmont Public Telescope Night at the observatory, next to the baseball field.

#### SATURDAY, JANUARY 20, SETUP 4:30 PM

Telescopes for a star party at Los Flores Ranch Park, in Santa Maria at 6245 Dominion Road. Setup entrance (with signs) will be up Dominion a bit north of the main entrance.

#### THURSDAY, JANUARY 25, SETUP 5 PM

Telescopes for Science Night at Brandon School, at 195 Brandon Drive in Goleta. We set up in their central courtyard. Buffet food for volunteers.

# WEDNESDAY, JANUARY 31, 4 AM TO SUNRISE Get up early and watch a **total lunar eclipse**!

# SBAU Clothing at Meetings

Pat McPartlin, SBAU Merch Manager

At monthly SBAU club meetings, please help your club by buying special **SBAU clothing!** 

I have deeply discounted prices on the old blue logo SBAU clothing—you can still see the old blue logo clothing on the SBAU website, but prices for the blue logo clothing are deeply discounted now. New photos are in the works to show the new all-color logos on the clothing and tote bags. The new all-color clothing and tote bags are priced as you see on the website. And, don't forget AU calendars!

I also have a large inventory of SBAU patches, pins, and cups, as priced on the website. If you have any questions or would like to place an order, please contact me at <a href="mailto:parsnip7@yahoo.com">parsnip7@yahoo.com</a>

Some sizes may not be in stock; I'll let you know, and when I'll have them. Happy 2018!

# Ocular BioTech for Winter Observers

Ever feared you'd freeze a vital body part while observing in frigid winter weather? Sorry you touched your tongue to that GM-8 counterweight right in the middle of a long exposure?

Ocular BioTech, a newly-formed subsidiary of Ocular Industries, ever watchful for the needs of amateur astronomers, is pleased to announce the availability of bioengineered replacement parts!

Astronomy clubs the world over used to have to seat their cold-maimed members in the back rows of their meetings to avoid frightening speakers and small children. With our help, these members can once again hold their noses (or ears, or fingers, or toes) high without shame, and we guarantee our results \*

Tycho Brahe had to observe for years with a bronze nose, which only made cold weather problems worse. He secluded himself for years on the island of Hveen because of his problem. At least he didn't die in Hveen (Kepler used his data), but he could have been much more productive with an Ocular thermo-snout replacement!

\*for 48 hours of observing, or one month from date of addition.



Now that's a big telescope! This is the mighty 68 centimeter (26.77 inch) Great Refractor telescope at the Archenhold Observatory in the Treptow district of Berlin. It's the longest pointable telescope in the world, and you can easily see why it's often referred to as the Himmelskanone, or Celestial Cannon. In fact, it was almost destroyed by Soviet troops fighting their way into Berlin in 1945, because they thought it was a weapon.

A scope like that needs a large mounting and some hefty counterweights, too.



Archenhold Observatory is also the site of the first public lecture by Albert Einstein on his theory of relativity, in 1915. There's a museum section, and smaller observatories for public viewing through shorter scopes and solar telescopes. It's well worth a visit if you find yourself in Berlin.

# From the President...

Jerry Wilson

Every year at this time, some newscast or another mentions the mystery of the Christmas Star. They speculate on a number of suggested astronomical events that could look like a sudden bright star moving across the sky. Among these suggestions are: a new star, or nova; the conjunction of two bright planets; or a comet. These are the ones I remember, and each one in turn falls short.

I think the key to realizing what the Christmas Star might have been is to remember that there has been a rather significant knowledge shift between the people of two thousand years ago and us now. When we look up at the stars we see far distant suns of other stellar systems. We're even counting planets around some. For entertainment, we watch the Enterprise go where no one has gone before, on its five year mission with Klingons on board. The embodied concepts and knowledge that underlie our entertainment was beyond imagination 2000 years ago.

When our ancestors looked at the stars, they were looking into heaven. Spiritual heaven. The heavens showed the inner working of events here on Earth. Their view of the heavens was more astrological than astronomical. The Christmas star was an event on an astrological chart or horoscope, not in the sky.

When the three wise men dropped in on Herod just before Christmas, they were asked, "What brings you here?" The three answered, "We're following the star." Herod basically replied, "What star?" He didn't know about the star until the wise men told him. Now, unless Herod had a bad neck and never looked up, he would've seen an unusually bright new star in the sky. If it was in the sky of course, which it was not.

In the east, where the wise men traveled from, they led their lives by horoscopes. The people of Israel did not. Hence, Herod was caught off guard. The astrological event that heralds a royal birth occurred on April 17 in 6 BC.

**Author's Note:** This article is based on content from the book "The Star of Bethlehem" by Michael R. Molnar, an astronomer at Rutgers University.

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Single = \$20 Family = \$25

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# **The Astronomical Unit**

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January 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 HAPPY NEW YEAR!	2	3	4	5 GENERAL MEETING 7 PM	6
7	8 TECH TALK KZSB (AM 1290) 9-10 AM	9	10	11	12	PLANNING MEETING 4 PM STAR PARTY 6 PM SBMNH
14	15	16 CAMINO REAL MARKETPLACE 7 PM	17	LA PATERA 5:30 PM	WESTMONT COLLEGE 6 PM	20 LOS FLORES RANCH PARK 4:30 PM
21	22 TECH TALK KZSB (AM 1290) 9-10 AM	23	24	25 BRANDON 5 PM	26	27
28	29	30	31 TOTAL LUNAR ECLIPSE 4 AM		•	