

Friday, September 3

Week 35 of 2010

September 2010

October 2010

S	M	T	W	T	F	S	S	M	T	W	T	F	S
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<p>8 AM</p> <p>9 AM</p> <p>10 AM</p> <p>11 AM</p> <p>Noon</p> <p>1 PM</p> <p>2 PM</p> <p>3 PM</p> <p>4 PM</p> <p>5 PM</p> <p>6 PM</p> <p>7 PM</p> <p>8 PM</p> <p>9 PM</p> <p>10 PM</p> <p>11 PM</p> <p>12 AM</p>	<p>10:00 AM AHSP 2010 opens for arrivals</p> <p>12:00 PM Lunch Dining Area</p> <p>5:00 PM Dinner Dining area</p> <p>6:30 PM Talk by Dr. David DeVorkin: Bringing Telescopes to the Public: Building and Operating a Public Observatory on the Nation's Mall Program Yurt</p> <p>9:00 PM Polar Alignment Workshop with Tom Kennedy Red Observing Field, gravel circle</p> <p>9:00 PM Informal Visual Observing Workshop with Donna Blosser Yellow Observing Field</p>	<p>• Timed Events</p> <ul style="list-style-type: none"> 10:00 AM to 10:00 AM AHSP 2010 opens for arrivals 12:00 PM to 1:00 PM Lunch Location: Dining Area Notes: For meal plan participants with code "1" on badges 5:00 PM to 6:00 PM Dinner Location: Dining area Notes: For meal plan participants with code "1" on badges 6:30 PM to 7:30 PM Talk by Dr. David DeVorkin: Bringing Telescopes to the Public: Building and Operating a Public Observatory on the Nation's Mall Location: Program Yurt Notes: An updated version of his extremely popular AHSP 2009 talk, Dr. DeVorkin's talk will discuss how the Smithsonian team located the telescope for the public observatory, took it apart, evaluated it and then transported and reassembled it. And with almost a year of operation to talk about, he'll also discuss what he and his team have learned about public outreach. It's a great story about making astronomy visible on the nation's mall. <p>Dr. David DeVorkin is senior curator of history of astronomy and space sciences at the Smithsonian Institution in Washington, DC. His major research interests are in the origins and development of modern astrophysics during the 20th Century. He is the author/editor/compiler of several books and more than 100 scholarly and popular articles. David DeVorkin holds a Ph.D. in the history of astronomy from the University of Leicester in the United Kingdom and a Master of Philosophy in astronomy from Yale University.</p> <ul style="list-style-type: none"> 9:00 PM to 11:30 PM Polar Alignment Workshop with Tom Kennedy Location: Red Observing Field, gravel circle Notes: Weather-dependent; will be held if clear. <p>Achieving imaging-quality polar alignment is not as hard as it sounds. Come to this always-popular workshop and learn all you need to know to master polar alignment.</p> <ul style="list-style-type: none"> 9:00 PM to 10:00 PM Informal Visual Observing Workshop with Donna Blosser Location: Yellow Observing Field Notes: Weather-dependent; will be held if clear. <p>Donna will be available every night at dusk to chat with beginners on a variety of observing topics. This informal get-together could cover anything from how to locate and recognize deep sky objects, types of objects to observe, tips on seeing faint objects, etc. Beginners questions will steer the topics discussed. Drop by for a short while or stay until the chat winds up for the evening. This is informal! Appropriate for observers of all experience levels.</p>
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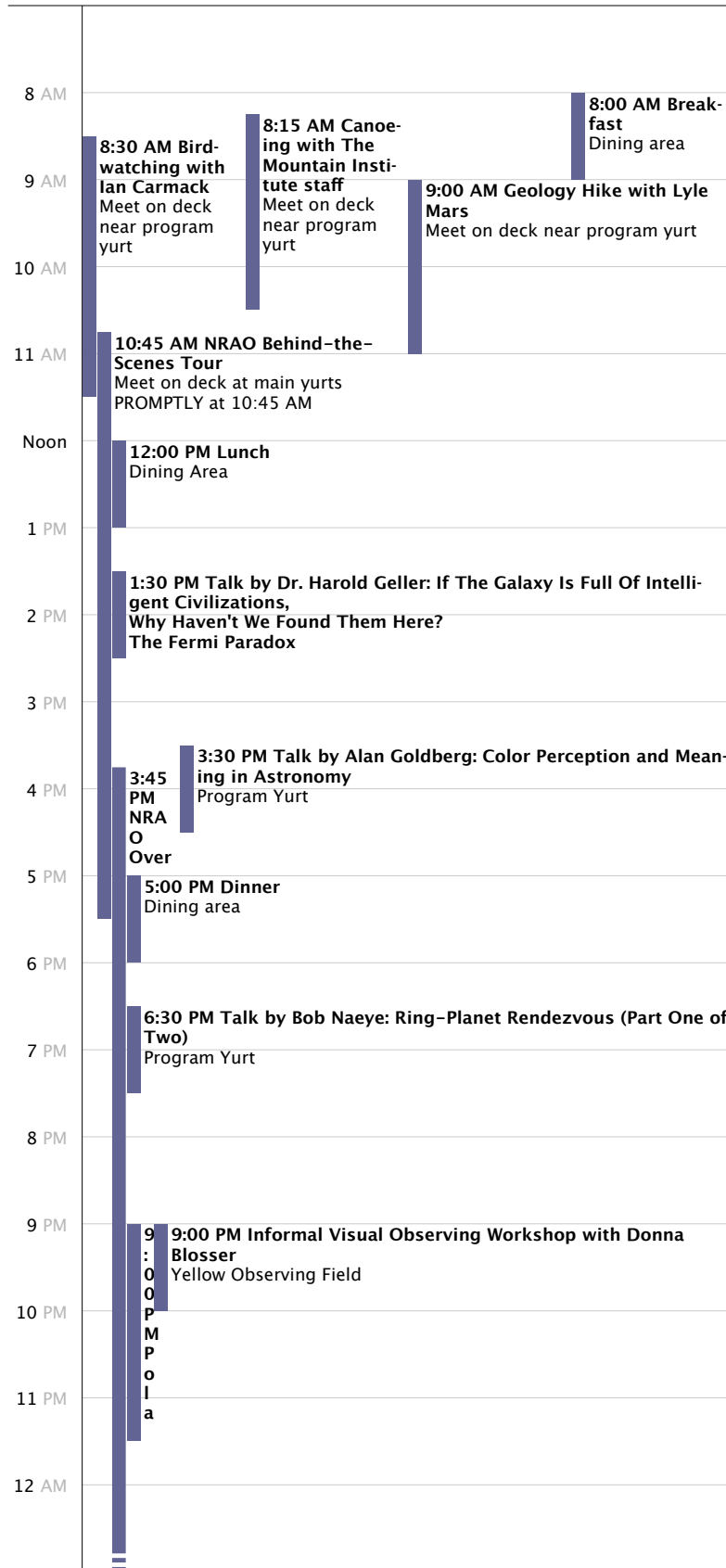
Saturday, September 4

Week 35 of 2010

September 2010

October 2010

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• Timed Events

- 8:00 AM to 9:00 AM Breakfast**
Location: Dining area
Notes: For meal plan participants with code "1" on badges
- 8:15 AM to 10:30 AM Canoeing with The Mountain Institute staff**
Location: Meet on deck near program yurt
Notes: *** PRE-REGISTRATION REQUIRED ***

Canoeing on Spruce Knob Lake. Available only by pre-registration; your badge should have the code "Z" printed on it.
- 8:30 AM to 11:30 AM Birdwatching with Ian Carmack**
Location: Meet on deck near program yurt
Notes: Whether you are a seasoned birdwatcher or a casual observer you are sure to enjoy one of our two birdwatching sessions. Don't miss this opportunity to see what West Virginia has to offer this time around. It will be later in the season and we expect cooler-climate populations to delight us with a visit.

Birdwatching sessions will occur Saturday and Sunday morning right after breakfast, weather permitting.

Bring binoculars if you have them. We will be walking through some uncut grass, so shoes (boots) that can withstand some dew may be a good idea.
- 9:00 AM to 11:00 AM Geology Hike with Lyle Mars**
Location: Meet on deck near program yurt
Notes: This is a fascinating hike for those interested in learning more about the geology of the Spruce Knob region. No prior knowledge of geology needed.
- 10:45 AM to 5:30 PM NRAO Behind-the-Scenes Tour**
Location: Meet on deck at main yurts PROMPTLY at 10:45 AM
Notes: *** PRE-REGISTRATION REQUIRED ***

Behind-the-scenes tour of the National Radio Astronomy Observatory at Green Bank, WV.

Lunch will be provided.

Available only by pre-registration; participants should have code "N" on their badges.
- 12:00 PM to 1:00 PM Lunch**
Location: Dining Area
Notes: For meal plan participants with code "2" on badges
- 1:30 PM to 2:30 PM Talk by Dr. Harold Geller: If The Galaxy Is Full Of Intelligent Civilizations, Why Haven't We Found Them Here? The Fermi Paradox**
Location: Program Yurt
Notes: Dr. Harold Geller of George Mason University will discuss what has been known for years as the Fermi Paradox. Simply put, if the galaxy were full of intelligent civilizations, why haven't we noted any? This discussion will address the difference in time needed to evolve intelligent life forms and the time needed to spread a civilization throughout the galaxy, and how these relate to this famous paradox.

Dr. Geller is currently Associate Professor and Observatory Director at George Mason University (GMU). He received his doctorate and master's degrees from GMU. He has taught physics and astronomy full-time for the past 11 years after having been an adjunct instructor for 8 years.

In 2010 he shared in four Telly Awards and in 2009 two Telly Awards for a series of online videos with Astrocast.TV. In 2008 he won the GMU Faculty Member of the Year Award and published a book titled "Astrobiolgy: The Integrated Science."

Past achievements include: award winning tour guide and lecturer with NASA Goddard Space Flight Center; past President of the Potomac Geophysical Society; developer of two educational multimedia CD-ROMs with CIESIN; faculty member at Northern Virginia Community College, Manassas; doctoral fellow of the State Council of Higher Education for Virginia; and, lecturer/operator at the Einstein Planetarium in the National Air and Space Museum, Smithsonian Institution.

Saturday, September 4

Week 35 of 2010

Dr. Geller has contributed to over 40 publications in education, astrophysics, astrobiology, and biochemistry.

■ **3:30 PM to 4:30 PM Talk by Alan Goldberg: Color Perception and Meaning in Astronomy**
Location: Program Yurt

Notes: Why do colors in astrophotos look so good, while colors in the eyepiece are so muted? The answer to this question leads to an intriguing story of the nature of the sky objects, physics of light, eyeballs, cameras, and computers. Alan will try to explain and show the difference between true color, pleasing color, and informative color when applied to imaging stars, planets, nebulae, and objects beyond.

Alan Goldberg is a member of NOVAC and a principal scientist with The MITRE Corp. in McLean, VA. He's been an amateur astronomer since elementary school, and finally owns an 8" SCT. After graduate study at Univ. of Texas and MIT in astronomy and planetary science, he worked on the design and operation of the Hubble Space Telescope. He has also worked on Landsat, NASA's Earth Observing Satellite (EOS) series, and NOAA's NPOESS weather satellite. He currently assists the government in buying commercial space-based Earth imagery.

■ **3:45 PM to 10:00 AM (9/5) NRAO Overnight Observing**

Location: Must be ON-SITE at NRAO by 3:45 p.m.

Notes: *** PRE-REGISTRATION REQUIRED ***

Overnight observing on the NRAO 40-foot educational dish.

Dinner on 9/4 and breakfast on 9/5 will be provided. Overnight accommodations in dorm-like facilities are included with this activity.

Available only by pre-registration; participants should have code "V" on their badges.

■ **5:00 PM to 6:00 PM Dinner**

Location: Dining area

Notes: For meal plan participants with code "2" on badges

■ **6:30 PM to 7:30 PM Talk by Bob Naeye: Ring-Planet Rendezvous (Part One of Two)**

Location: Program Yurt

Notes: Expectations were sky high for NASA's Cassini mission to Saturn: humanity's first orbiter around the Ring Planet. But since going into orbit around Saturn in 2004, Cassini has managed to exceed even the most optimistic projections. The orbiter has returned thousands upon thousands of spectacular images of the planet, rings, and moons, and it has transformed our understanding of this miniature planetary system. Hexagonal storms on Saturn. Bizarre structures in the rings. Organic lakes on Titan. Liquid water just beneath the surface of Enceladus.

In this two-part lecture, Sky & Telescope editor in chief Robert Naeye will discuss some of the major findings and show some of the best pictures from Cassini and the European Huygens probe, which touched down on the surface of Titan in January 2005. The first talk will cover Saturn and its rings. The second talk will cover the moons.

Robert Naeye is editor in chief of Sky & Telescope magazine and SkyandTelescope.com.

Bob has authored two books and contributed to two others. His 1997 book *Through the Eyes of Hubble: The Birth, Life, and Violent Death of Stars* was published by Kalmbach. His 2000 book *Signals from Space: The Chandra X-ray Observatory* was co-published by Turnstone and the Harvard-Smithsonian Center for Astrophysics. He helped write two chapters for the recent book *Star Wars: Where Science Meets Imagination*, co-published by National Geographic and the Boston Museum of Science. And he contributed a chapter to a recent book celebrating NASA's 50th Anniversary, published by Faircount.

Bob owns five telescopes and more eyepieces than he can count. His favorite deep-sky activity is perusing the ghostly tendrils of the Veil Nebula using an OIII filter. Bob is a proud member of the American Astronomical Society, the Astronomical Society of the Pacific, the Amateur Telescope Makers of Boston, and the Astronomical Society of Harrisburg, which is based near his hometown of Hershey, Pennsylvania.

In case you're wondering, his family name is pronounced NOY-uh (think "paranoia"), which originates in the Flanders region of The Netherlands.

■ **9:00 PM to 11:30 PM Polar Alignment Workshop with Tom Kennedy**

Location: Red Observing Field, gravel circle

Notes: Weather-dependent; will be held if clear.

Achieving imaging-quality polar alignment is not as hard as it sounds.

Come to this always-popular workshop and learn all you need to know to master polar alignment.

■ **9:00 PM to 10:00 PM Informal Visual Observing Workshop with Donna Blosser**

Location: Yellow Observing Field

Notes: Weather-dependent; will be held if clear.

Donna will be available every night at dusk to chat with beginners on a variety of observing topics. This informal get-together could cover anything from how to locate and recognize deep sky objects, types of objects to observe, tips on seeing faint objects, etc. Beginners questions will steer the topics discussed. Drop by for a short while or stay until the chat winds up for the evening. This is informal! Appropriate for observers of all experience levels.

Sunday, September 5

Week 36 of 2010

September 2010

October 2010

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8 AM	...NRAO Overnight Observing Must be ON-SITE at NRAO by 3:45 p.m.
8:30 AM	Birdwatching with Ian Carmack Meet on deck near program yurt
9:00 AM	9:00 AM Spruce Knob Summit Hike with The Mountain Institute staff
9:00 AM	9:00 AM Geology Hike with Lyle Mars Meet on deck near program yurt
9:00 AM	9:00 AM Canoeing with The Mountain Institute staff Meet on deck near program yurt
8:00 AM	8:00 AM Breakfast Dining area
12:00 PM	12:00 PM Lunch Dining Area
1:00 PM	1:00 PM Talk by Guy Brandenburg: Options for Student-Made telescopes
1:30 PM	1:30 PM Talk by Alan Goldberg: Common and Not-so-Common Telescope Optics Program Yurt
3:30 PM	3:30 PM Talk by Bob Naeye: Ring-Planet Rendezvous (Part Two of Two) Program Yurt
5:00 PM	5:00 PM Dinner Dining area
5:30 PM	5:30 PM Door Prize drawing Deck near meal/program area
6:30 PM	6:30 PM Talk by Rod Mollise: In the Footsteps of William and Caroline: Conquering the Amateur Astronomer's Life List Program Yurt
9:00 PM	9:00 PM Polar Alignment Workshop with Tom Kennedy Red Observing Field, gravel circle
9:00 PM	9:00 PM Informal Visual Observing Workshop with Donna Blosser Yellow Observing Field

• Timed Events

- 3:45 PM (9/4) to 10:00 AM NRAO Overnight Observing**
Location: Must be ON-SITE at NRAO by 3:45 p.m.
Notes: *** PRE-REGISTRATION REQUIRED ***

Overnight observing on the NRAO 40-foot educational dish.

Dinner on 9/4 and breakfast on 9/5 will be provided. Overnight accommodations in dorm-like facilities are included with this activity.

Available only by pre-registration; participants should have code "V" on their badges.
- 8:00 AM to 9:00 AM Breakfast**
Location: Dining area
Notes: For meal plan participants with code "2" on badges
- 8:30 AM to 11:30 AM Birdwatching with Ian Carmack**
Location: Meet on deck near program yurt
Notes: Whether you are a seasoned birdwatcher or a casual observer you are sure to enjoy one of our two birdwatching sessions. Don't miss this opportunity to see what West Virginia has to offer this time around. It will be later in the season and we expect cooler-climate populations to delight us with a visit.

Birdwatching sessions will occur Saturday and Sunday morning right after breakfast, weather permitting.

Bring binoculars if you have them. We will be walking through some uncut grass, so shoes (boots) that can withstand some dew may be a good idea.
- 9:00 AM to 11:00 AM Spruce Knob Summit Hike with The Mountain Institute staff**
Location: Meet on deck near program yurt
Notes: *** PRE-REGISTRATION REQUIRED ***

Hike to the summit of Spruce Knob. Available only by pre-registration; your badge should have the code "H" printed on it.
- 9:00 AM to 11:00 AM Geology Hike with Lyle Mars**
Location: Meet on deck near program yurt
Notes: This is a fascinating hike for those interested in learning more about the geology of the Spruce Knob region. No prior knowledge of geology needed.
- 9:00 AM to 11:00 AM Canoeing with The Mountain Institute staff**
Location: Meet on deck near program yurt
Notes: *** PRE-REGISTRATION REQUIRED ***

Canoeing on Spruce Knob Lake. Available only by pre-registration; your badge should have the code "C" printed on it.
- 12:00 PM to 1:00 PM Lunch**
Location: Dining Area
Notes: For meal plan participants with code "3" on badges
- 1:00 PM to 1:30 PM Talk by Guy Brandenburg: Options for Student-Made telescopes**
Location: Program Yurt
Notes: Guy Brandenburg, an expert on amateur telescope making (ATM), will present a short talk originally developed for the Astronomical Society of the Pacific.
- 1:30 PM to 2:30 PM Talk by Alan Goldberg: Common and Not-so-Common Telescope Optics**
Location: Program Yurt
Notes:

Galileo first looked at the sky and made profound discoveries with a telescope 401 years ago. For good reason, almost no one uses his telescope design today.

Instead, we have developed a wide variety of telescopes using refraction and reflection to optimize performance, convenience, and cost. These designs solve the problems of viewing the heavens for everyone from amateurs viewing on field trips to professionals viewing from space, and looking at everything from the Sun and its corona to the faintest galaxies and nebulae.

Sunday, September 5

Week 36 of 2010

Alan will provide a non-technical overview of the major and some minor optical telescope designs, and their advantages and disadvantages for various astronomy applications, from binoculars to adaptive optics. He will help explain why there is not a simple answer to the question: which telescope is best?

Alan Goldberg is a member of NOVAC and a principal scientist with The MITRE Corp. in McLean, VA. He's been an amateur astronomer since elementary school, and finally owns an 8" SCT. After graduate study at Univ. of Texas and MIT in astronomy and planetary science, he worked on the design and operation of the Hubble Space Telescope. He has also worked on Landsat, NASA's Earth Observing Satellite (EOS) series, and NOAA's NPOESS weather satellite. He currently assists the government in buying commercial space-based Earth imagery.

3:30 PM to 4:30 PM Talk by Bob Naeye: Ring-Planet Rendezvous (Part Two of Two)

Location: Program Yurt

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Robert Naeye is editor in chief of Sky & Telescope magazine and SkyandTelescope.com.

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In case you're wondering, his family name is pronounced NOY-uh (think "paranoia"), which originates in the Flanders region of The Netherlands.

5:00 PM to 6:00 PM Dinner

Location: Dining area

Notes: For meal plan participants with code "3" on badges

5:30 PM to 6:30 PM Door Prize drawing

Location: Deck near meal/program area

6:30 PM to 7:30 PM Talk by Rod Mollise: In the Footsteps of William and Caroline:

Conquering the Amateur Astronomer's Life List

Location: Program Yurt

Notes: "Uncle" Rod Mollise is familiar to amateur astronomers as the author of numerous books and magazine articles on every aspect of astronomy. He is most well-known, however, for his books on SCTs; especially his latest one, *Choosing and Using a New CAT* (Springer), which has become the standard reference for these popular instruments.

Rod's previous book, *The Urban Astronomer's Guide*, was designed to help the many amateurs who must do most of their observing from light polluted urban and suburban backyards enjoy the deep sky, and has proven to be very popular with both novice and veteran astronomers. Rod's writings can also be found in astronomy magazines including *Sky and Telescope*, *Amateur Astronomy Magazine*, *Astronomy Technology Today*, and on numerous online forums including his website, Rod's Astro Land.

Uncle Rod is an engineer by profession, but he also finds time to teach astronomy to undergraduates at the University of South Alabama in

Mobile.

When he's not on the road speaking at star parties and astronomy clubs, Rod shares a rambling old Victorian home, "Chaos Manor South," in Mobile's historic Garden District, with his wonderful wife, Dorothy, three cats and, at last count, twelve telescopes.

9:00 PM to 11:30 PM Polar Alignment Workshop with Tom Kennedy

Location: Red Observing Field, gravel circle

Notes: Weather-dependent; will be held if clear.

Achieving imaging-quality polar alignment is not as hard as it sounds. Come to this always-popular workshop and learn all you need to know to master polar alignment.

9:00 PM to 10:00 PM Informal Visual Observing Workshop with Donna Blosser

Location: Yellow Observing Field

Notes: Weather-dependent; will be held if clear.

Donna will be available every night at dusk to chat with beginners on a variety of observing topics. This informal get-together could cover anything from how to locate and recognize deep sky objects, types of objects to observe, tips on seeing faint objects, etc. Beginners questions will steer the topics discussed. Drop by for a short while or stay until the chat winds up for the evening. This is informal! Appropriate for observers of all experience levels.

Monday, September 6

Week 36 of 2010

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8 AM	8:00 AM Breakfast Dining area
9 AM	9:00 AM Field Collimation Workshop with Rod Mollise
10 AM	
11 AM	
Noon	12:00 PM Lunch Dining Area
1 PM	
2 PM	
3 PM	
4 PM	
5 PM	5:00 PM Dinner Dining area
6 PM	
7 PM	6:30 PM Talk by Brad Hoehne: The Human Eye at Night Program Yurt
8 PM	
9 PM	9:00 PM Polar Alignment Workshop with Tom Kennedy Red Observing Field, gravel circle
10 PM	
11 PM	
12 AM	

• Timed Events

- **8:00 AM to 9:00 AM Breakfast**
Location: Dining area
Notes: For meal plan participants with code "3" on badges
 - **9:00 AM to 10:00 AM Field Collimation Workshop with Rod Mollise**
Notes: Uncle Rod shows you how to align the optics of your reflector without blood, sweat, or tears. This is a MORNING activity.
 - **12:00 PM to 1:00 PM Lunch**
Location: Dining Area
Notes: For meal plan participants with code "4" on badges
 - **5:00 PM to 6:00 PM Dinner**
Location: Dining area
Notes: For meal plan participants with code "4" on badges
 - **6:30 PM to 7:30 PM Talk by Brad Hoehne: The Human Eye at Night**
Location: Program Yurt
Notes: Brad will speak about the physiology of the eye: how dark adaptation works, what the resolution of the eye is, and how to use this information to observe difficult objects.
- Brad Hoehne is the Vice President of the Columbus Astronomical Society.
- **9:00 PM to 11:30 PM Polar Alignment Workshop with Tom Kennedy**
Location: Red Observing Field, gravel circle
Notes: Weather-dependent; will be held if clear.

Achieving imaging-quality polar alignment is not as hard as it sounds. Come to this always-popular workshop and learn all you need to know to master polar alignment.

Tuesday, September 7

Week 36 of 2010

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