

Longmont Astronomical Society

March 2006



*The Home Planet Stellar Views
Calendar*

February Meeting Notes

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Fiske Planetarium schedule March and April 2006 Events

Classified

The LAS Warehouse

April Sky Map

The Home Planet Stellar Views

Hello Astronomers,

We have had another good month for star gazing. We did a star night for Clara Wente's class at FRCC at Westminster Campus. Thanks once again you guys for large turn out to help, with members from LAS and BASS. We had 11 scopes all together and I was worried we had only two from LAS. We had clear skies and no wind, good seeing even once again. We seem to be having a winning streak for clear steady skies for these events. Weather is marginal all week then we get one of those good nights. Saturn was exceptional, always a treat on good night. Clara will be doing another night in spring, we will help again, was a fun time. I really like Clara's attitude, she is full of life and fun to be around.

Adam Jensen from FRCC in Longmont wants to schedule another star night for his class again in my yard here in Niwot. I will need some more volunteers to help run some scopes. This is part of our agreement to use classroom at FRCC. Adam has not set the date yet but I will let you all know when.

We did a star party night for Boulder County Day school in Gunbarrel also. It was a pretty good night once again. We seem to be building quite the reputation for throwing star parties for schools. The giving of our time and sharing the skies with kids, must be good for our Karma, you know how hard it is to predict before hand a good night for these. Nature has been good to us.

Our friend Mike Salazar from the Forest Service opened the gate and got us into Crow Valley campground for our monthly new moon dark sky viewing. It will be for the last time before it opens back up to general public again. 15 dark sky marines showed up to brave the cold clear skies, largest crowd for winter months I think. We really like the place for viewing, wish we had a spot like that all the time, dark skies are good there. Dan L. did it once again and slept outside in back of his truck bed, in record low temperature for us this winter, with 3 degrees out in early morning. We had clear steady skies all night long, Very heavy frost by 3 am but still a good night. You know the best planet views are from Refractors and Bill Possel's new refractor is awesome. We got to try it out under best conditions yet for incredible Saturn views, best this year so far. My 30 scope was awesome on the galaxies, sometimes 4 or 5 in eyepiece together, way cool. My favorites like NGC 4565 were so good, stretching out of the eyepiece. Old friend Steve Lynch showed up for quite the excellent night of views. You know in winter months when you start out at 7 pm and go till 2 or 3 am you got your gas money's worth of viewing in for the long drive.

LAS is still the best, we do more public viewing and sharing than anybody, and still manage to do our new moon dark sky adventures. Big thank you to all the volunteers who make it all work out. The Home Planet Stellar views are so good from the Grasslands; it keeps us coming back for more. I just love living in Colorado, where we can get to the dark skies. The public awareness of light pollution is happening but not fast enough for me. We are trying to educate public on ways to save our sky views. Well till next month's adventures begin, it will be a little friendlier for us die hards as weather gets warmer. As I always say, See you in the dark, bye, Gary

Calendar

Mar:	New Moon:	25 th – Pawnee
	Star Party	2 nd - Boulder Country Day School
	1st qtr	4 th – Flanders Park
	Meeting:	16 th – Topics:
Apr:	New Moon:	28 th and 29 th – Sterling or somewhere.....
	1st qtr:	5 th – Flanders Park
	Meeting:	20 th – Topics:
May:	New Moon:	27 th - Pawnee
	1st qtr:	6 th – Astronomy Day at Twin Peaks Mall & Flanders that night
	Meeting:	18 th – Topics:

Jun: New Moon: 24th - Members' choice or.....Rocky Mtn Star Stare: 22nd – 26th
 1st qtr: 3rd – Flanders Park
 3rd qtr: 17th – Tri-Town Party??? Michelle is this on again?
 Meeting: 15th – Topics:

Jul: New Moon: 20th, 21st, and 22nd – Fox Park Weekend under the Stars
 1st qtr: 1st – Flanders Park – This is July 4th timeframe
 Meeting: 20th – Topics:

Aug: New Moon: 19th or 26th – Fox Park or Pawnee? And the date could go either way.
 1st qtr: 5th – Flanders Park –
 Meeting: 17th – Topics:

Sep: New Moon: 23rd – Pawnee
 1st qtr: 2nd – Flanders Park. This is Labor Day weekend.
 Meeting: 21st – Topics:
 1st qtr: 30th – Flanders Park

Oct: New Moon: 21st - Pawnee
 1st qtr: 28th – Flanders Park
 Meeting: 18th – Topics:

Nov: New Moon: 18th - Pawnee
 1st qtr: 25th – Flanders Park. This is Thanksgiving weekend.
 Meeting: 16th – Swap Meet/Nominations

Dec: New Moon: 23rd - Pawnee
 1st qtr: 30th – Flanders Park
 Meeting: 21st – Topics: Elections

February 2006 Meeting notes

Meeting called to order by President Gary Garzone.

Welcome Dr. John Weiss CICLOPS Cassini Imaging Central Laboratory for Operations from Boulder.

Introduction of visitors: One, read about us in the paper!

Officers report:

Treasurer report by Vern Rabin: Account balances reported. S&T Magazine subscriptions sent, Astronomy magazine order going soon.

Some badges in, badge orders going in. Observer handbook. 2006 membership, 51 of 118 paid, about 41%. Contribution to the Dark Skies association, we did \$50 last year. Anybody interested in establishing a Paypal account? Discussion about Paypal, Vern, Julie, Michelle endorsing.

Vice President report Michelle Lavers. Astronomy day May 6th, by Victoria Secret's in the mall again this year. We are looking for volunteers, nice to get new blood. We are also trying to get more posters for the kids. Julie mentioned school is doing different Astronomy day previous weekend April 24th? Twice the fun!

Suzanne wanted to mention we have training sessions for Sommers Bosch observatory to run the scopes, in March. Refer to the Fiske Planetarium schedule.

Webmaster report from Steve Albers: Mike Hotka added "Membership Award Page" for AL awards. It is sorted by category or recipient.

Newsletter report, Philippe Bridenne out of town: Bob Spohn passed out the newsletter.

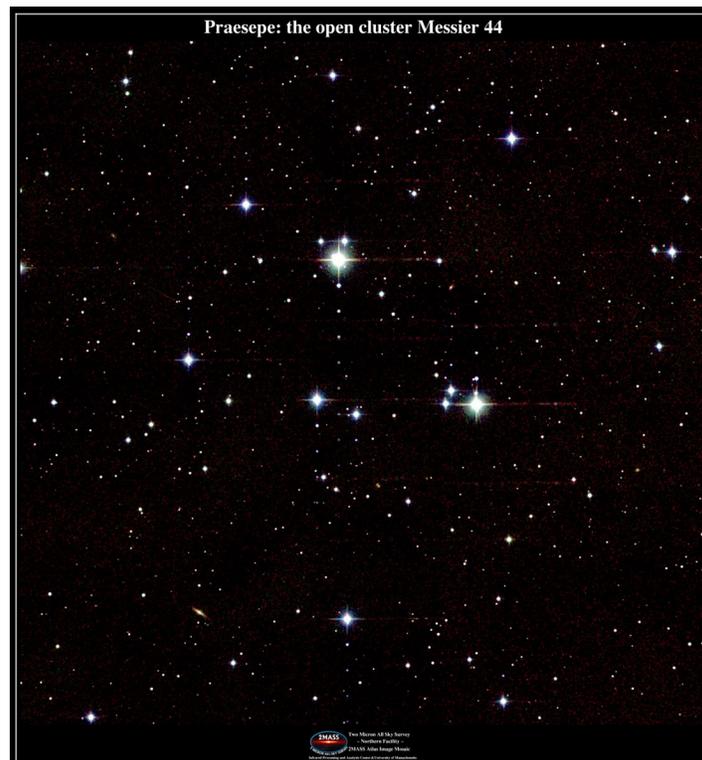
Equipment Report by Leigh Pierson: Leigh took some time off this year to do some things. Back to scopes, boxes are done. Warm weather needed for polyurethane. All components ready to go. Tubes prepared with Don, tube layout system for 6" scopes. This spring coat a couple of mirrors. Don has pictures to pass around. Don made template for cells, procedure written up. Should we put it on the website? After it is polished.

Looking for nomination for replacement for Ray Warren for fundraising chair.

Fundraising report by Ray Warren, \$122 from banquet to add to treasury. Ray gave a sales pitch for new members. Stickers, patches. Observing log. We need to order some more T-shirts, some of old and new designs. Great planispheres, back has instructions to build scale solar system. Un-bumper stickers. The shop is open in the back!

Short topic from Dick Mallot: Constellation of the Month: Cancer. We want to encourage members to get out observing, that's why Mike added the awards list to the web site. Fiske planetarium on April 29th, but that is also Sterling star party weekend! We have been invited back out there.

Another short topic from Dave on sky coordinates. Where is Cancer? East of Gemini, North of Hydra. Easy to find now, Saturn is in middle of it! Short history of Cancer, involving Hercules and the Hydra. Highlights of Cancer. Brightest star is dim, 3.52. M44: Praesepe (Latin for "manger"), the Beehive, easily visible to naked eye.



M44

M67 less impressive. Notable double stars, including zeta Cancer. Two of the stars form a binary. 1531: Haley's comet discovered in Cancer. Only 8 stars visible to the naked eye. Appendix with references. Brian Kimball mentioned during the Olympics, one of the cameras zoomed to Saturn, and rings were visible!

Dave talked about celestial navigation. Three methods you can use to navigate, beginning with star hopping. Second way is to use the alt-azimuth system. Cardinal points of compass, 360 degrees. It is used to find Iridium flares or satellites. 270 degrees directly west, for example. It is time-sensitive, so only good for 10 15 minutes as it precesses across the sky. Star charts, showing Declination, celestial equator crosses Orion's belt more or less, 40 degrees to 50 degrees above the horizon. Right ascension, in 24 hours, divided by minutes and seconds. Goto scope can take RA-DEC coordinates to find objects not in the database.

Old business? New business? Carrie Martin star party tomorrow night, weather permitting. Next request is FRCC in Westminster campus, 23rd of February, next Thursday, weather permitting. Shaw middle school was great night, great seeing, very clear. Pete Peterson moving his dome over to Gary's property, setting up a concrete pad.

--- BREAK ---

John W. Weiss: A Year and Half at Saturn, Some Recent Results from Cassini.

<http://www.ciclops.org>

Star Party at FRCC Westminster by Gary Garzone

FRCC star night in Westminster was very good, with clear skies and excellent views of Mercury and Saturn. Clara is the teacher at FRCC who puts on the hands on astronomy star party for kids there. Thanks to LAS and BASS volunteers, large crowds and weather was good, not so cold. We lucked out again, doing pretty good for urban skies. Clara's thank you to us e mail, I had to share with club, later, Gary

Star Party at FRCC Westminster by Clara Wentz

THANK YOU! THANK YOU! THANK YOU!

Wow! What a successful night, I estimate 150+ students, faculty, family, and friends who attended at sometime during the night. I must put in a much larger order next time for hot chocolate and coffee. I appreciate very much the time and enthusiasm you put in to make it such a wonderful event. I've already heard some rave reviews from the few mulling about here on a Friday. Some of my colleagues were very impressed at how many attended and asked how I could get so many astronomers to bring telescopes. Apparently they still don't realize the strength of the attractive force of astronomy.... ;-)

I'm hoping to do this again this semester, but look forward to seeing you soon at BASS or LAS meetings.

Again, thank you for all your effort and time that made this event such a success.

Sincerely,

Clara Wentz - FRCC - Westminster

Crow Valley Star Party report by Gary Garzone

Hello Astronomers, Sometimes we are in the right place at the right time. The lucky dozen of us, went to Crow Valley campground by Briggsdale, Colorado in the Pawnee National grasslands for some Dark skies for new moon star party we try to do every month. Not only was it clear and no winds but we even had some

close to excellent seeing going on most of the night. I thought last month was cold out there on the high plains but we beat that record with low of 3 degrees. I stayed up till 3:30 am, pretty well frosted over by then. Dan L slept outside in bed of his truck again; heck if he survived 8 degree lows last month, 3 degrees might work too? Big turn out of dark sky marines again! Cold only slows us down a little.

We found the supernova in M100 galaxy easily. Magnitude 13 or 14, I would say. We also saw Mercury early evening. Orion was spectacular as usual in dark skies. Galaxies sometimes 4 or 5 in eyepiece at one time, Whirlpool Galaxy of M51 was one the best views yet. So many good ones, Edge on Galaxy NGC 4565, M104 Sombrero. We even did Jupiter and summer stuff early morning like M13 M 92, M57, just felt funny doing those summer objects, in below freezing cold weather.

I took many pictures again. Saturn was the treat for sure!

Later, Gary

Crow Valley Star Party report by Julie Carmen

I wanted to thank Gary for arranging another star party at Crow Valley.

Because it has facilities I ventured out. The sky was spectacular and I got to see my first fireball! That was very fun. ISS was bright too.

Even though we had to leave early due to the cold, thanks for those of you who helped us out with red flashlight, fuses, and RV-warm up time. You all rock!

Looking forward to some warmer observations, but Saturday night was so great.

Even got to see the Milky Way from only an hour and half from home!

Thanks all,

Julie

How do I do What I do Part 3 by Mike Hotka

In part three of How I Do What I Do, I will discuss preplanning your upcoming observing session.

Once I have determined an Astronomical League observing program to do, I use my Deepsky Astronomy Software (DAS) program to create an observing list of all the targets of this program. This allows me to easily enter my observations of each object and print a summary report, showing when I observed each object of the list. Once I have observed an object on the list, I create a second list for this observing club, removing any object already observed on this list and is named What's Left to Observe list.

The other advantage of having this list in the DAS program is that I can then print a complete set of finder star charts for the observing program. I print them all and put them into a 3 ringed notebook for later use. I also print a report of the What's Left to Observe list and keep it in this notebook also.

I now watch the moon cycle, for 3rd quarter through new moon, and choose a couple of weekends that this phase of the moon falls on. I use the television weather reports, the NWS reports and watch the Clear Sky Clock for the location I am planning to drive to. I most often drive to the Pawnee Grasslands, so I can put Briggsdale, CO into the NWS local forecast to see the long range predictions of the weather. If the weekend looks favorable for going out to observe, I start to preplan my observing session.

I now choose about 60 objects from the list that will be in a favorable position in the sky to observe. A favorable position means that they are at least 45 degrees above the horizon in the western or eastern sky. I choose objects so that as the night progresses, they will "rotate" into this 45 degree area of the sky.

I now list these 60 objects on a separate piece of paper, including their magnitude, so I have an idea of how "faint" these guys are. I also list for each object, the page number in the Night Sky Observer's Guide that the object is referenced on. This is for when I need to read a description of an object, I can quickly find the page number to read. Once you are under the night sky, you don't want to be fumbling through paper, looking for something in red light. It's a hard thing to do and wastes valuable dark sky time.

I then pull the star charts for these 60 objects out of the notebook and have them available for easy reference when I am ready to find the object.

You are ready to observe. Now all you need is for the weather to cooperate.

A few months ago, Dick Mallot gave a nice presentation of what you should take with you when you go out observing. I will not reiterate those lists here, for they are posted on our LAS web site. But you do need to make your own list of those things that you take out with you time and time again. Have this list at your vehicle when you are loading it and you will not find out later you forgot something.

I keep my books and other small items in a clear, plastic tub. All my preplanned observing notes are in this tub. All I have to do is grab the tub and I know all my charts and other observing supplies are in the vehicle. It also helps keep your items dry if you are caught in a sudden rain storm. I saw this once, and the person was so busy stowing their scope that they didn't have time to put their books away.

I also have purchased a fishing tackle box. I keep my eyepieces, extra batteries, pencils, and other small observing items in this box. It too, once loaded into the vehicle, will have all your observing items on their way to the dark sky site. In fact, I have two other cases that hold finder scopes, brackets, radios and other small items I like to take with me. So, I load four "cases" of stuff, and I am almost ready to start the engine.

I usually pack some warmer clothes, even in the summer, so that when the temperature falls throughout the night, I can be comfortable. Don't forget this when going to Fox Park, WY. The temperature can be 85 degrees in the day time and 20 degrees at night, with ice on your telescope. So, when going to this dark sky site, consider taking your winter gear with you. I always do. If you don't need it, it stays in the car. Just ask Ken Tryon how uncomfortable a night at Fox Park can be with just a light jacket.

My hourly observing rate is about 5 objects an hour. It takes me some time find the objects, then I like to look at the object with different powers of magnification and different filters, if the object behaves differently to being filtered. For instance, Planetary Nebulae sometimes show better with an OIII filter. I often draw what I see in the eyepiece, so that adds to the time I spend on one object.

I take many breaks throughout the evening, to wonder to other peoples' scopes to see what they are looking at. I also just sit back and gaze at the beautiful stars one sees when they get away from city lights. It's during these breaks I'll break out a snack.

Don't forget snacks. Hot drinks in a thermos. Sandwiches. Sweets. These are all good things to take out with you. Try to take items that are easy to open in the dark and are not too messy. I once tried to take that prepackaged, individual serving beef sausage sticks with me and that stuff is tough to get open in the dark. I made some sandwiches once, and wrapped them in sticky paper like Glad Wrap. There were also difficult to open in the dark.

Preplanning your outing is the key to a successful, fun filled evening. And if the sky doesn't behave itself, you can sit in the dark, eat the snacks you brought and visit with those that have ventured out with you.

Hanging out with astronuts on the plains of Colorado is one of my favorite things to do. Hopefully, it will become one of yours.

Fiske Planetarium schedule March and April 2006 Events

Live Astronomer Talks

Thursday, March 16th 7:30 pm - Astronomy of the Ancient Pueblos

Join CU's Dr. Kim Malville as he uses the Fiske dome to recreate the skies visible to ancestral Pueblos in the 11-13th centuries and explores the astronomy of Chaco Canyon, Chimney Rock, Mesa Verde, Yellow Jacket and Hovenweep with extensive visuals.

Friday, March 17th 7:30 pm - Astronomy of the Ancient Pueblos

Join CU's Dr. Kim Malville as he uses the Fiske dome to recreate the skies visible to ancestral Pueblos in the 11-13th centuries and explores the astronomy of Chaco Canyon, Chimney Rock, Mesa Verde, Yellow Jacket and Hovenweep with extensive visuals.

Laser Shows

Friday, March 17th 9:30 pm - Laser Dave Matthews Band

Enjoy DMB music put to live lasers and special effects in this dazzling multimedia presentation!

Friday, March 17th 10:45 pm - Pink Floyd: The Wall

Music, video, lasers, and special effects meet in Fiske's presentation of Pink Floyd's classic album, The Wall.

Family Matinees

Saturday, March 18th 2:00 pm - Stars and Lasers

Enjoy an introduction to the night sky, then be transported to a galaxy far, far away with colorful laser lights choreographed to the music of Star Wars, Indiana Jones, and Close Encounters of the Third Kind.

Saturday, March 18th 3:15 pm - Symphony of the Stars

Take a musical journey with laser light as classic themes to great movies are enhanced by stunning graphics and star fields.

Live Astronomer Talk

Thursday, March 23rd 7:30 pm - Colorado Skies: Mars Reconnaissance Orbiter

Experience the beauty of the night sky from the comfort of Fiske Planetarium, then explore Mars with NASA's newest mission to the red planet, the Mars Reconnaissance Orbiter – see the latest images!

Star Show

Friday, March 24th 7:30 pm - Mars Revealed

Explore Mars from a new perspective through Fiske Planetarium's newest public show. Created by CU faculty and students, this show features the latest discoveries and analysis from Mars.

Laser Shows

Friday, March 24th 9:30 pm - Laser Aerosmith

Enjoy Steve Tyler's best as Fiske's intense lasers and pulsing sound-system take you on a high-flying journey.

Friday, March 24th 10:45 pm - Pink Floyd: Welcome to the Machine

Gathering some of the most memorable moments of Pink Floyd's music, "Laser Floyd: Welcome to the Machine" is a tribute to one of the greatest rock bands of all time.

Family Matinees

Saturday, March 25th 2:00 pm - Moons and Lasers

Learn about Earth's moon – its phases and eclipses – then enjoy a fun family-friendly laser show that treats both your eyes and ears!

Saturday, March 25th 3:15 pm - Space Odyssey

This musical tour of the universe is a dazzling display of music and lasers inspired by the moon, planets and stars. Enjoy music from movies and popular artists, all with an outer-space theme.

Family Matinees

Tuesday, March 28th 10:00 am - Kids in Space

Join interstellar traveler Captain Ann Dromeda and her crew of kids in space as the planetarium turns into a spaceship that explores the nine planets of the solar system.

Tuesday, March 28th 12:00 pm - Stars and Lasers

Enjoy an introduction to the night sky, then be transported to a galaxy far, far away with colorful laser lights choreographed to the music of Star Wars, Indiana Jones, and Close Encounters of the Third Kind.

Tuesday, March 28th 2:00 pm - Adventures Beyond the Solar System

Go beyond our solar system as you explore other star systems, galaxies and the furthest edges of the universe.

Family Matinees

Wednesday, March 29th 10:00 am - Perseus and Andromeda Laser Show

Come hear the most popular tales of the night sky. Join our cast of laser hosts as you experience the story of the beautiful princess Andromeda and brave Perseus who saves her from dire misfortune.

Wednesday, March 29th 12:00 pm - Space Primer

This interactive live program allows the students to set the flight plan to visit any three planets in our solar system. You might explore the giant volcanoes of Mars, or fly through the rings of Saturn, or visit the frigid surface of Pluto.

Wednesday, March 29th 2:00 pm - Moons and Lasers

Learn about Earth's moon – its phases and eclipses – then enjoy a fun family-friendly laser show that treats both your eyes and ears!

Wednesday, March 29th 4:00 pm

FREE live talk at Fiske -- Eclipse: In a Different Light Celebrate Sun-Earth Day on March 29 and learn about the spectacular total eclipse of the Sun! This FREE live talk is presented by Dr. Suzanne Traub-Metlay at Fiske Planetarium -- bring your family! You can't see the eclipse from Colorado but it will be visible in parts of Africa, southeastern Europe and Central Asia.

Thursday, March 30th 10:00 am - Space Storm

Explore the Sun-Earth connection with Fiske's newest original production funded by NASA/TIMED and CU's Laboratory for Atmospheric and Space Physics. Learn how sunspot cycles and solar flares affect you!

Thursday, March 30th 12:00 pm - Space Odyssey Laser Show

This musical tour of the universe is a dazzling display of music and lasers inspired by the moon, planets and stars. Enjoy music from movies and popular artists, all with an outer-space theme.

Thursday, March 30th 2:00 pm - The Great Space Chase Laser Show

Take a journey through the cosmos with intergalactic traveler Lt. Foting in search of a missing intergalactic accelerator suit. As he uncovers the mystery, kids also learn about the science of space travel and the splendors of the universe.

Live Astronomer Talk

Thursday, April 6th 7:30 pm - Colorado Skies: Extraterrestrial Life with Matt Benjamin
The beauty of the night time sky will be viewed from the comfort of the theater of the Fiske Planetarium. Then consider the prospects of life on Mars, Europa (a moon of Jupiter) and elsewhere in this engaging live discussion!

Star Show

Friday, April 7th 7:30 pm - Searching for Distant Worlds
People have been searching the night skies for centuries, but only now have we begun to discover planets circling the distant stars. Come learn why it is so difficult to find these distant worlds, and explore recent developments in our search for planets beyond our own solar system.

Laser Shows

Friday, April 7th 9:30 pm - Laser U2
The power and passion of U2 is captured in laser light in a dynamic show at Fiske Planetarium that covers the band's long musical history.

Friday, April 7th 10:45 pm - Pink Floyd: Dark Side of the Moon
Explore Pink Floyd's epic Dark Side of the Moon in a classic laser extravaganza with special effects and stunning visuals.

Family Matinees

Saturday, April 8th 2:00 pm - Space Primer
This interactive live program allows the students to set the flight plan to visit any three planets in our solar system. You might explore the giant volcanoes of Mars, or fly through the rings of Saturn, or visit the frigid surface of Pluto.

Saturday, April 8th 3:15 pm - Jazz Fantasia
Jazz is one of America's true original art forms. The rich history of jazz is brought to life in this nostalgic and fun family-friendly laser show.

Live Concert

Saturday, April 8th 8:00 pm - mindSpiral
mindSpiral provides thinkMusic for smartPeople: intelligent space music served with a smile. World-famous electronic musicians Rus Foster, Mike Metlay, Nick Rothwell, Paul Vnuk, Jr., and Greg Waltzer provide an evening of original soundscapes accompanied by planetarium effects and a live laser show.

Live Astronomer Talks

Thursday, April 13th 7:30 pm - Venus Express Update with Dr. Suzanne Traub-Metlay
Launched in November 2005, Venus Express will reach its target in April 2006. Join Dr. Suzanne Traub-Metlay of CU's Fiske Planetarium as she discusses the cloud-shrouded planet, the mission and the future prospects of the European Space Agency.

Friday, April 14th 7:30 pm - Venus Express Update with Dr. Suzanne Traub-Metlay
Launched in November 2005, Venus Express will reach its target in April 2006. Join Dr. Suzanne Traub-Metlay of CU's Fiske Planetarium as she discusses the cloud-shrouded planet, the mission and the future prospects of the European Space Agency.

Laser Shows

Friday, April 14th 9:30 pm - Laser Radiohead
Showcasing alternative rock's greatest contemporary band, Fiske's laser show is visually intense and stunningly satisfying.

Friday, April 14th 10:45 pm - Pink Floyd: The Wall

Music, video, lasers, and special effects meet in Fiske's presentation of Pink Floyd's classic album, The Wall.

Family Matinees

Saturday, April 15th 2:00 pm - Adventures Beyond the Solar System

Go beyond our solar system as you explore other star systems, galaxies and the furthest edges of the universe in this family-friendly show.

Saturday, April 15th 3:15 pm - Perseus and Andromeda

Come hear the most popular tales of the night sky. Join our cast of laser hosts as you experience the story of the beautiful princess Andromeda and brave Perseus who saves her from misfortune.

Live Astronomer Talk

Thursday, April 20th 7:30 pm - Colorado Skies: Galactic Evolution with Matt Benjamin

The beauty of the night time sky will be viewed from the comfort of the theater of the Fiske Planetarium, then examine how galaxies develop and mature.

Star Show

Friday, April 21st 7:30 pm - Cosmic Collisions

Worlds have been colliding since the dawn of the Solar System. Take a look at the way impacts shape our Earth's neighborhood and see the aftermath of the impact of Comet Shoemaker-Levy-9 with Jupiter.

Laser Shows

Friday, April 21st 9:30 pm - Laser Grateful Dead

Honoring the late genius, Jerry Garcia, this multimedia show melds some of the band's greatest hits with stunning images and lasers.

Friday, April 21st 10:45 pm - Pink Floyd: Welcome to the Machine

Gathering some of the most memorable moments of Pink Floyd's music, "Laser Floyd: Welcome to the Machine" is a tribute to one of the greatest rock bands of all time.

Family Matinees

Saturday, April 22nd 2:00 pm - Stars and Lasers

Enjoy an introduction to the night sky, and then be transported to a galaxy far, far away with colorful laser lights choreographed to popular space-themed music.

Saturday, April 22nd 3:15 pm - Symphony of the Stars

Take a musical journey with laser light as classic themes to great movies are enhanced by stunning graphics and star fields.

Live Astronomer Talks

Thursday, April 27th 7:00 pm - Cassini Mission Update with Dr. Joshua Colwell

Cassini is well into its four-year mission to explore Saturn, its magnificent rings and a host of icy moons. Dr. Joshua Colwell of CU's Laboratory for Atmospheric and Space Physics will guide you through the Saturn system as seen by one of our most distant robot explorers.

Thursday, April 27th 8:15 pm - Saturn Overlooked with Dr. John Weiss

Saturn itself is one of the most fascinating bodies in the solar system: it possesses aurorae, helium rain, metallic hydrogen and much more. Dr. John Weiss of the Cassini Imaging Team will discuss this amazing giant and what has been learned by the Cassini mission during its first year in orbit.

Friday, April 28th 7:00 pm - Cassini Mission Update with Dr. Joshua Colwell

Cassini is well into its four-year mission to explore Saturn, its magnificent rings and a host of icy moons. Dr. Joshua Colwell of CU's Laboratory for Atmospheric and Space Physics will guide you through the Saturn system as seen by one of our most distant robot explorers.

Friday, April 28th 8:15 pm - A New View of Titan with Dr. Nicholas Schneider

In January 2005, while NASA's Cassini spacecraft continued to map it from orbit, the European Space Agency's Huygens probe landed on Saturn's largest moon, Titan. Join Dr. Nick Schneider of CU's Department of Astrophysical & Planetary Sciences on a tour of this newly discovered landscape of an extraordinary world.

Laser Shows

Friday, April 28th 9:30 pm - Laser OutKast -- *NEW!*

Gritty hip-hop from the deep South comes to Fiske Planetarium in this hot new laser show! Peace out with OutKast's soulful rap and funk!

Friday, April 28th 10:45 pm - Pink Floyd: Dark Side of the Moon

Explore Pink Floyd's epic Dark Side of the Moon in a classic laser extravaganza with special effects and stunning visuals.

Fiske-SBO Astronomy Day

Saturday, April 29th Noon – 10:00pm - FREE public events at Fiske Planetarium and Sommers-Bausch Observatory!

Enjoy FREE festivities for all ages at Fiske Planetarium & Sommers-Bausch Observatory (SBO) as we celebrate space science achievements and unveil new interactive exhibits! Giveaways, prizes, food and family fun are just part of the excitement -- Get your hands on our telescopes and see for yourself what astronomy is all about!

For more info, please visit our website at <http://fiske.colorado.edu> or call (303) 492-5002 (automated line).

Classified

To buy:

To sell:

I am trying to sell a Celestron Ultima 9.25. If the deal were local I would expect closer to \$1,600 or so and accept credit cards.

<http://www.astromart.com/viewad.asp?cid=233874>

Jared Workman

I got a new (800mHz) computer & wish to sell my 3rd computer. It's a 433mHz, 64meg RAM, 9 Gig HD space, 33.6K modem, and SoundBlaster sound card, with a 15" monitor, programmable keyboard & MS mouse, with Windows 98 SE for sale. \$180. No problems with it what-so-ever. Will deliver & setup within 30 miles of Ft. Collins. It would be great for a stand-alone application or a kid's computer.

Contact Tom Teters tomt@starmon.com

Orion telescope EQ 120mm 4.7" lens achromatic refractor; F/8.

This telescope is one year old and is in great condition.

All the following items are included with the telescope:

- ✓ True track dual axis DC motor drive tracking system (is great for doing long exposure astrophotography)
- ✓ EQ mount
- ✓ Tripod
- ✓ Telrad with dew shield
- ✓ 1.25" diagonal mirror (also accept 2" eyepieces)
- ✓ 6X30 Finder Scope
- ✓ Collimation eye piece
- ✓ 25 mm & 4mm eye pieces
- ✓ Astrosystems new waterproof cover
- ✓ A JMI refractor hard case, is able to fit a 5" or 6" refractor. There is a lot of storage space for all types of accessories such as eyepieces, etc..

This is a great and wonderful telescope for any beginner or intermediate astronomer.

All for \$1,000 firm! Contact Marc and Julie at (303) 210-3966 (Cell) or (303) 682-5428 (Home) or email if interested; marcwiley@wildmail.com

I have an ORION SKYVIEW 4.5" Reflector telescope with finder scope; equatorial mount tripod, with 9mm and 25mm lenses, 1.25 mm Barlow and extra filters. The telescope is in great condition, just toooo advanced for my amateur status. All for \$500!

Contact Anna Vayr at 303-776-7167 or via email at anna.vayr@spot.colorado.edu

ST-8E CCD camera with carrying case, power supply, color filter wheel with upgraded filters, manual. \$3,000 o.b.o. Contact Mike Hotka, mhotka@yahoo.com or 303-438-0097.

To give:

FREE: Monitor, HP D1195A 15" CRT, will display 1024x768.

Clean, like new, works. Contact: Bob Noble nobler@att.net

If you have astronomy stuff to buy or to sell, send an email to your newsletter editor philippe_bridenne@yahoo.com

The LAS warehouse

LAS logo T-Shirts:

Crewneck, navy blue, 8" white LAS logon on front

\$10 - S, M, L, XL

\$12 - 2XL

\$13 - 3XL

\$14 - 4XL

Light blue with the lapel logo and Dobsonian telescope.

\$1 LAS un-bumper stickers

\$5 LAS Observing Log Book

\$1 LAS Whizzy Wheel (astronomy calculator)

\$2 - 5" LAS vinyl sticker, black or white

\$5 - 4" LAS embroidered patch

\$1 - LAS Planisphere

