Next Meeting: May 5  7:30 PM
Web Astronomical Images for Science…
and Pretty Pictures

Tom Fay, Agilent Technologies

NCAS Business at 7 PM
Meeting directions  Discovery Science Center
703 East Prospect Rd, Fort Collins
http://www.dcsom.org/index.html
In Fort Collins, from the intersection of College Ave and Prospect Rd, head East about 1/2 mile. See the Discovery Center sign to the South. Enter the West Wing at the NE corner. From I-25, take Exit 268; West to Lemay Ave, continue West 1/2 mile, see Discovery Center on the left.

NCAS Programs
June 2  James Green, HST, the End Game

NCAS Dark Sky Star Party Dates
May 6, 7, 27, 28
Cactus Flats site is on undeveloped parcel of prairie about 6 miles West of Briggsdale. Take Colo Hwy 14 East from I-25 (Exit 269). Go 19 miles East to Ault. Continue 18 miles East of Ault. At County Rd 65 (Milepost 170), turn North, go one mile. Site is through the wire gate on the right, no road, close gate and set up. Beware of the cactus. The site is now officially wheelchair accessible, but there are no facilities so bring essentials. Call Tom Teters, tomt@starmon.com , with questions about star party status or dates, 482-5702.

Starwatch at Discovery Science Center
703 E Prospect Ave, Fort Collins
May 13  7:30 pm

Dates for Rocky Mountain National Park 2005
June 10, 17; July 1, 15, 29; Aug 12, 26
Contact Dan Laszlo if you wish to volunteer at the Upper Beaver Meadows site this summer. djlaszlo@aol.com

Other Events
Little Thompson Observatory Star Night, Berthoud
May 20  Star Night
http://www.starkids.org

About Our May 5 Speaker
Tom Fay is a software engineer at Agilent Technologies. He’s been interested in astronomy since the last passing of Halley’s Comet (1985) and a member of NCAS for nearly as long. Astronomy appeals to him as a part of the science world where amateurs can stay close to, and even participate in, cutting edge science. Of course, there’s also the combination of imaging/photography, lots of electro/mechanical/optical gadgets, and the application of software and computers, too. On the down side, as a morning person, Tom suffers when he actually spends significant time looking through telescopes in the dark. That has led to his interest in the (day-time) web availability and uses of professionally-gathered astronomical images, the subject of this talk.

April 7 Program
NASA: Changes Ahead
Dr. Andrea Schweitzer
The administration’s budget for NASA adds a 2.4% boost in dollars over last year. The total proposed is 16 billion dollars, and the trend in support is positive at a time when deficit spending is high, and there is less support for other sciences and for social programs. This is a bit less than 0.6 percent of the total federal request. NASA is unusual as a creation of President John F. Kennedy. It is the product of a presidential mandate, and reports directly to the President. Its direction is set by the White House. Congress may then weigh in with its funding authority to tweak details. NASA has come through a difficult time with the Columbia disaster. There were highlights from science programs, while human space exploration recovered. The public understands with the astronauts that we can never achieve zero risk. The crews do not struggle with apprehension. They want to go! The tenure of Administrator Sean O’Keefe is considered positive. In spite of his background as a manager, he pursued the spirit of science well. His decision to cancel the HST repair mission attracted flak, but was done in a way that preserved the long-term viability of the NASA budget. It is political reality that science is most efficiently done with machines, but they don’t attract funding like human missions. The International Space Station is not a spectacular science success. It is a vital source of support for our international partners. In this way it contributes to our national security. NASA is obligated to follow through with international commitments, so the ISS is to be completed in 2010, and phased out as 2020 approaches. The replacement for the Shuttle fleet has high priority, since it
retires by 2010. The target of 2010 to 2014 for Crew Exploration Vehicle test flights will be moved up. Robotic Precursors are planned for lunar landing in 2008, and to Mars in 2011. Human landing on the Moon would occur between 2015 and 2020. Project Prometheus will aim for a test of a nuclear reactor by 2008, and fly a demonstration mission within a decade. The rearrangement of priorities means support will be cut for some. The future of several of NASA’s research centers is cloudy.

**NCAS Business, April 7 2005**

President Greg Halac called the meeting to order. He announced the Sterling Star Party for April 7-9, the Grand Mesa Star Party June 10-12, the CSAS Star Stare in July and Weekend Under The Stars at Foxpark Wyoming August 4 to 7. He announced the Discovery Center Starwatch on April 15. The club remembered Dorothy Pillmore and her support for NCAS. Dorothy’s husband Dick Pillmore expressed her wish to contribute her astronomy library to the club. Her gift was gratefully acknowledged. Dave Dunn and Greg Halac gave summaries of their views at the Cactus Flats site in the preceding month. The treasurer’s report was given by Nate Perkins. NCAS volunteers for RMNP starwatching were recruited. Andrea Schweitzer is starting her Project Astro programs soon, and also recruited volunteers for Little Thompson Observatory.

**Sterling Star Party 2005, by Vern Raben**

I arrived at Sterling Reservoir last Thursday afternoon around 5 and was immediately impressed by the facilities. There were actually picnic tables, shelters, tent pads, bathrooms, and showers -- all very nice. It was fairly windy, around 5-10 mph most of the time and occasionally 20 or so. Setting up my tent was difficult and took a lot longer than usual. Fortunately, the sky was mostly clear and very transparent. I was quite impressed with how dark it was, nearly as good as Fox Park. Normally, I just surf around using the Nexstar’s goto, but I decided it was time to practice locating the faint fuzzies manually. I started off taking a look at M42/43 in Orion. I was able to trace nebulosity with the Nexstar11 for about a 3/4 degree to the northeast and about the same to the southwest. Next I found M37, M36, and M38 clusters in Auriga. The Pleiades were not impressive in binoculars, thin clouds in the area masked most of the nebulosity. The Praesepe however, was gorgeous. By then, Jupiter was pretty high up, so I couldn't resist taking a look. Not much detail was apparent, other than the main bands as atmospheric turbulence was a problem. I next went to Leo, star hopping to locate M95, then on to M96 and M105. I decided wasn't going to win the Messier marathon, as I was only averaging about an object every half hour or so! I took a break and looked at M51 in Bob's scope -- very impressive. It was then past midnight and clouding up in Leo so I decided to locate the Whirlpool on my own. To my surprise it was visible even with 7x50 binoculars. It had cleared up in Leo around 2 am, and I located M65, M66 and nearby NGC 3628. A little after three I started in Virgo, locating M60 and then galaxy hopping west to M59, M58 and then north to M89, M90, and west to M86 and M84. By 4 am Sagittarius was fairly far up, so we couldn't resist taking a look at the Lagoon. Back in Virgo, I got lost multiple times somewhere between M87 and M49. I finally gave up, and punched in M13 on the control. I had to take a quick look that at that fabulous globular to end the night just before 5. By the next afternoon, the winds were getting stronger. My tent was suffering from a couple bent poles and the weatherman was predicting rain later in the evening with snow coming in Saturday afternoon. I decided to wimp out and head home. Vern

From Gary G:

Hi all , The Sterling Star party was canceled the last minute for Saturday night viewing because of big snow storm that is moving into area. Bob S, Roy M., Dick M, Vern, Scott, Brian K, Ray W, Julie and Mark, myself, Gary, and my wife Carol tried to endure the mighty Sterling high plains winds again. Carol and I left for Sterling early Thursday afternoon and then broke down near Wiggins, Colorado. I was driving along and fan belt broke and got caught into other belts which threw them all off their pulleys, going 75 miles an hour on interstate which is really an 80 mph highway when I suddenly had no power assist steering, no brakes and no water pump, which quickly over heated, as I struggled to steer and brake to get off road. We called for tow truck and waited 3 hours or so, got to Sterling at 8 pm, started at 1 pm. Still stuck in Sterling, now needed to get motor home repaired the next day. We finally got it all fixed up and finally made it to Sterling late Friday morning. We missed the Thursday night viewing which was awesome I heard, total clear skies all night long. Friday the High plains winds blew very hard. 50 mph gusts at least and clouds. Vern's tent was pushed down and then Bob S's tent , then Roy's tent was battered in the winds. Clouds and winds scared off star viewing plans for Friday night. Mark W and Julie C, Ray W, Bob S, Vern, Roy all left Friday after fighting the high winds , with clouds, the viewing was not looking too good for Friday night. I told them it would clear if they left, you know how that works?? After dark Brian K and I waited for skies to clear but clouds persisted, winds finally did quite blowing, but then looked like rain so I tore down the 30 scope and loaded it up into trailer. Big mistake, after 11:30 pm clouds started to break and by 12:30 was total clear skies , no wind at all for rest of night. We woke up to clear blue sky, warm temperatures even. Brian Kimball was saying all tents there from now on , must be UL Sterling wind proof approved to survive the high plains winds. The quest for dark sky places continues it seems. Sterling is so windy at times, we might use another spot next year, but Where?? The club needs to have it own site someday maybe? I will send off some pictures. Sunset with Snow cranes, are the dots in picture. Sterling is a great spot when not windy. Astronomers are a tough breed to play the weather game all the time . I will talk more at LAS meeting this month. later, Gary
Good web pages to read about NASA planning and politics

NASA Watch
http://www.nasawatch.com/
not a NASA website, but it's what all the NASA employees read

New NASA Administrator Mike Griffin
Announcement and short bio:

Commentary:
http://www.nasawatch.com/archives/2005/03/feedback_wha.html#more

Current news about the International Space Station and Shuttles
http://www.spaceref.com/iss/

NASA Reports

Vision for Space Exploration, Feb 2004
http://www.nasa.gov/pdf/55583main_vision_space_exploration2.pdf

NASA Direction for 2005 and Beyond
http://www.nasa.gov/pdf/107490main_FY06_Direction.pdf

NASA Budget
http://www.nasa.gov/about/budget/

Aldridge Report

NASA Integrated Space Operations Summit
(planning for Shuttles, ISS)

NASA Internal Briefing on "Why NASA is Important"

NASA TV
http://www.nasa.gov/multimedia/nasatv/index.html

Best Looks
Moon By Mars 5/2 and 5/31; by Venus 5/8
By Saturn 5/13; Near Jupiter 5/19
Mercury Difficult in SE predawn first week
Venus WNW at dusk
Mars Low in SE at dawn. By Uranus 5/15
Jupiter In S in middle of the night
Saturn In W early evening

Eta Aquariid Meteors Peak May 6
A few morning meteors can be seen a few days around this date.

Lunar Occultation of Antares morning of May 24
Disappearance about 1:26 MDT, reappears about 2:33 MDT

From: Dan Laszlo
2001 S Shields St Building H
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TO: