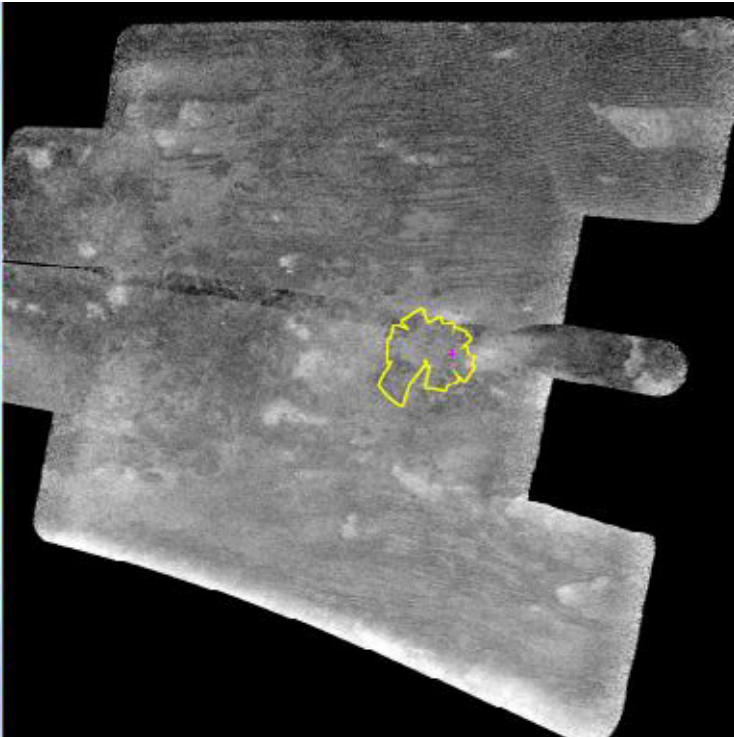
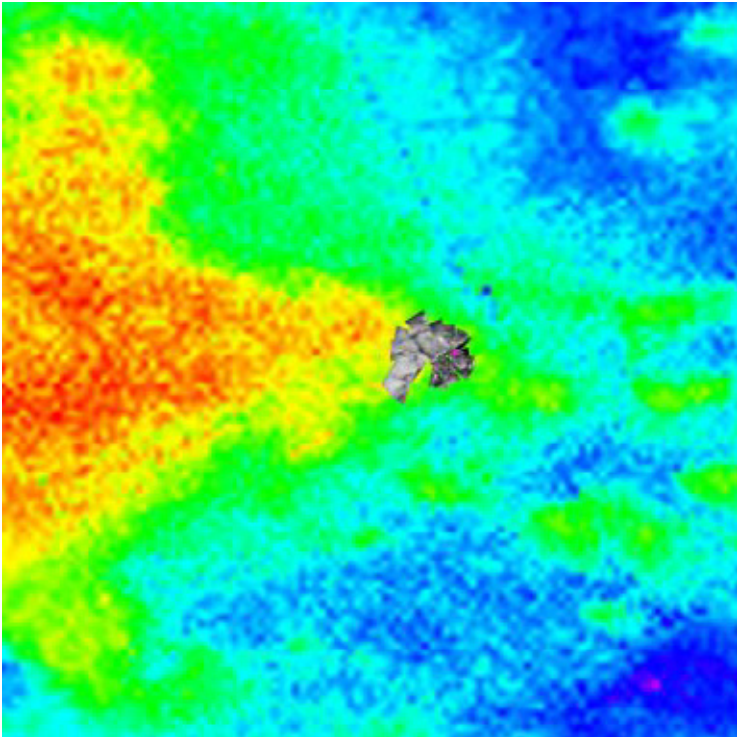


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Cassini pinpoints Huygens' landing site



THE CASSINI SPACECRAFT CARRIED THE EUROPEAN Space Agency's Huygens probe to Saturn and released it in December 2004. The probe landed on Titan Jan. 14, 2005, acquiring a set of images using the descent imager/spectral radiometer camera as it parachuted to the surface.

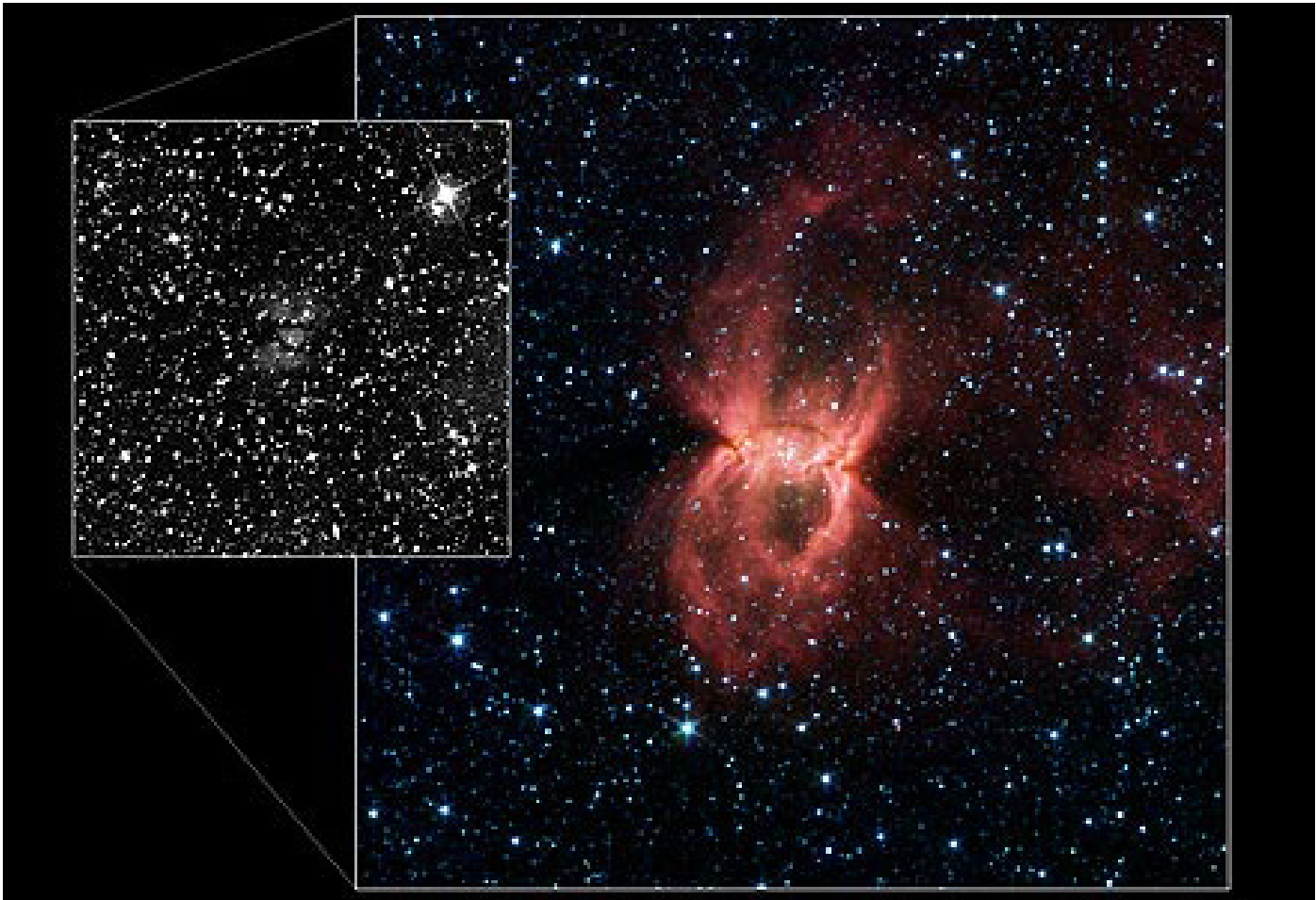
As Cassini continued to orbit Saturn, its imaging science subsystem and visual and infrared mapping spectrometer mapped the region where the Huygens probe landed. On Friday, Oct. 28, Cassini's radar instrument provided the highest resolution orbital data yet of this area.

The two images shown here tell the story. On the left is a composite of the imaging camera and infrared data. On the right is the synthetic aperture radar image. The Huygens descent images are shown inset on

the left image and outlined on the right. The cross within the outlined area in both images shows the best estimate of the actual Huygens landing site. This is a preliminary result, based on the best information available at the present time.

On closer inspection, bright features within the Huygens mosaic seem to correspond to smaller features in the map composed of data from the visual and infrared spectrometer and imaging camera. On the right, the correspondence is less clear. In radar images bright features are usually rougher, so one would not necessarily expect an obvious connection.

To see the Cassini image in color, visit <http://photojournal.jpl.nasa.gov/catalog/PIA03569>.



IN THE CONSTELLATION CIRCINUS, WHERE previous visible-light observations by the Digital Sky Survey (left) saw only a faint hourglass-shaped patch of obscuring dust and gas, the JPL-managed Spitzer Space Telescope's dust-piercing eyes see a big "Black Widow Nebula" teeming with clusters of massive young stars (right).

In the Spitzer image, the two opposing bubbles are being formed in opposite directions by the powerful outflows from massive groups of forming stars. The baby stars can be seen as specks of yellow where the two bubbles overlap.

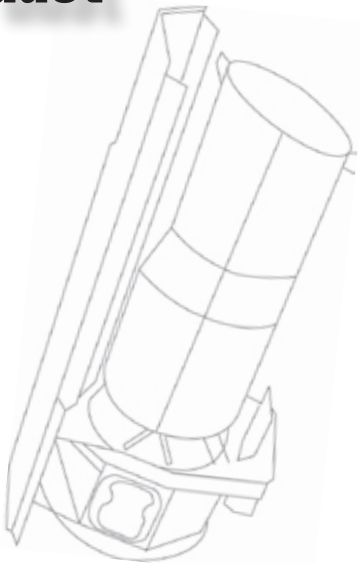
When individual stars form from molecular clouds of gas and dust they produce intense radiation and very strong particle winds. Both the radiation and the stellar winds blow the dust outward from the star creating a cavity, or bubble.

In the case of the Black Widow Nebula, astronomers suspect that a large cloud of gas and dust condensed to create multiple clusters of massive star formation. The combined winds from these groups of large stars probably blew out bubbles into the direction of least resistance, forming a double bubble.

The infrared image was captured by the Galactic Legacy Infrared Mid-Plane Survey Extraordinaire Legacy project. The Spitzer picture is a four-channel false-color composite, showing emission from wavelengths of 3.6 microns (blue), 4.5 microns (green), 5.8 microns (orange) and 8.0 microns (red).

To view the image, visit <http://www.spitzer.caltech.edu/Media/mediainages/sig/sig05-020.shtml>.

Spitzer finds Black Widow Nebula hiding in the dust



News Briefs



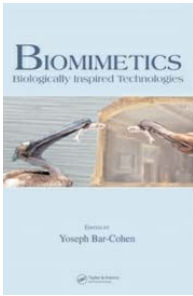
Dr. Paul Weissman



Nancy van Wickle



Dr. Yoseph Bar-Cohen



Weissman named fellow

Senior Research Scientist DR. PAUL WEISSMAN has been elected a fellow of the American Association for the Advancement of Science.

He is being honored for his “fundamental studies of the dynamics and evolution of the Oort cloud and its relationship to the Kuiper belt and the evolution of comets.”

Each year the organization elects members whose “efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished.”

Weissman has worked at JPL since 1974. Among the positions he has held are co-investigator and science coordinator for Galileo’s Near Infrared Mapping Spectrometer; astronomy science lead for the Table Mountain Observatory; interdisciplinary scientist on the International Rosetta Mission; and guest investigator in the Infrared Astronomical Satellite Project. He has won six NASA Group Achievement Awards for various phases of the Galileo mission.

Weissman earned his master’s and doctorate in planetary and space physics from UCLA.

Women At Work honors van Wickle

NANCY VAN WICKLE, administrative assistant to the JPL Deputy Director, has been named a winner of the 2005 Medal of Excellence Award by Women At Work, a Pasadena-based non-profit job and career resource center.

Van Wickle, a 25-year JPL employee, said she was honored by the selection and praised Women At Work for providing “dignity to women in whatever situation they’re in.”

Businesses throughout the Los Angeles area honor women employees through the Women At Work award. At JPL, nominations are submitted by the Director’s Advisory Council for Women. Van Wickle’s nomination cited her efforts to improve teamwork and performance; community outreach work; and camaraderie with co-workers.

Van Wickle received the award at a ceremony in Pasadena in October.

Bar-Cohen publishes book

DR. YOSEPH BAR-COHEN, supervisor of the Advanced Technologies Group (355N), is the editor and co-author of a new book, “Biomimetics: Biologically Inspired Technologies.”

“In this book,” Bar-Cohen said, “I view nature as the biggest laboratory that ever existed or ever will, and in its evolution it tested every field of science and engineering leading to inventions that work well and last. This enormously large pool of inventions has always been a great model for imitation and inspiration to human innovation.”

The book, Bar-Cohen’s fourth, includes contributions from top international researchers and developers in the field of biomimetics and provides both a comprehensive review of the state of the art as well as the challenges and outlook for potential development, he said.

Bar-Cohen, a physicist and JPL senior research scientist, joined the Lab in 1991. That year, he established the Nondestructive Evaluation and Advance Actuators Lab (<http://ndea.jpl.nasa.gov>), which has been responsible for a series of innovative concepts and mechanisms for planetary exploration, medical, commercial and other applications.

Supervisors honor Deep Impact



From left: Leticia Montanez, Felicia Sanders, Jennifer Rocca, Keyur Patel, Raymond Frauenholz, Rick Grammier, Steve Wissler, Mike Hughes.

The Los Angeles County Board of Supervisors has honored JPL’s Deep Impact team. In an Oct. 25 ceremony, Supervisor MICHAEL ANTONOVICH presented team members in attendance with scrolls, congratulating the team for its successful mission earlier this year.

Earlier this year, the Board of Supervisors also paid homage to JPL’s Mars Exploration Rovers mission.

Help sought for L.A. students

The JPL Education Office seeks volunteers for LA’s BEST (Better Educated Students for Tomorrow) to provide after-school visits to elementary schools in December.

On one day between Dec. 1 and 9, from 3 to 5 p.m., volunteers will present one-hour workshops at one of 30 participating schools in the Los Angeles Unified School District. Volunteers will select a campus in the geographic region of their choice. Student presentations can be on Earth science, space exploration, technology or any other JPL-related topic.

The Education Office will host a one-hour training/overview/materials session on Wednesday, Nov. 9, at 11:30 a.m. in the 167 conference room. For more information, call RITA TORRES, ext. 4-1444.

LA’s BEST, sponsored by the Office of the Mayor of Los Angeles and the Los Angeles Unified School District, serves 21,000 students. For information, visit www.lasbest.org.

Lab wins third recycling award

JPL recently received its third California Integrated Waste Management Board Award for waste-reduction efforts accomplished through “voluntary efforts to reduce, reuse, recycle and buy recycled.” In addition, NASA reviews of JPL have consistently praised the JPL Recycle Program as one of the best in the agency.

Some of the material being recycled at JPL includes white paper, cardboard, toner and ink jet cartridges, metal chips, plastic bottles, glass bottles, newspapers, metal cans, wooden pallets and, most recently, Tyvek suits and solder.

Buying material with recycled content is also a priority at JPL. The Environmental Affairs Program Office urges staff to buy products with recycled content. Call SHARON HARRIMAN, ext. 4-8630, for help.

For more information on the scope of the JPL recycling program, call TAEHNA GOODRICH at ext. 4-1973, visit the Environmental Affairs Program Office site at <http://eapo.jpl.nasa.gov> or see the JPL Environmental Quick Reference Guide. Various environmental training classes are also available. Call ALISON WEISBIN at ext. 4-8527 for more information on training.

Symposium coming to Pasadena

Interface 2006, a symposium on the interface of computing science and statistics, will be held in May in Pasadena. The event is cosponsored by JPL’s Earth Science Research and Advanced Concepts Office.

This is the annual symposium of the Interface Foundation of North America, a professional society of statisticians, computer scientists, mathematicians and discipline scientists who work on the “interface” of computing science, statistics and applications.

The event will be held May 24–27 at the Westin Pasadena. The theme is “Massive Data Sets and Streams.” The program includes a wide variety of sessions that may be of interest to the JPL community, such as: defense and homeland security; astrophysics and astronomy; climate and weather; solar and space physics; solid Earth geophysics; mining Earth science data; spatio-temporal data mining; streaming data; statistics and information technology; telecommunication data streams; network traffic analysis; and curve fitting for massive complex data sets. There are also sessions devoted to various life and social science topics.

Besides the invited program, three other categories of papers and talks are being solicited: refereed, special focus and contributed. Refereed submissions are due Jan. 1; special focus sessions and contributed papers are due Feb. 1.

Abstract submission and registration are now open. Visit www.galaxy.gmu.edu/Interface2006/i2006web-page.html. For more information, call DR. AMY BRAVERMAN at ext. 4-6168.

Special Events Calendar

Ongoing Support Groups

Alcoholics Anonymous—Meets Wednesdays at 11:30 a.m.

Caregivers Support Group—Meets the first Thursday of the month at noon in Building 167-111 (the Wellness Place).

Codependents Anonymous—Meets at noon every Wednesday.

Lambda (Gay, Lesbian, Bisexual and Transgender Networking Group)—Meets the first Friday and third Thursday of the month at noon in Building 111-117. For more information, call Randy Herrera, ext. 3-0664.

Parents Group for Children With Special Needs—Meets the second Thursday of the month at noon in Building 167-111 (the Wellness Place).

For more information on any of the support groups, call the Employee Assistance Program at ext. 4-3680.

Friday, November 4

Caltech Women’s Club—A “welcoming coffee” is offered from 11 a.m. to 1 p.m. in von Kármán Auditorium. New members are invited. Light snacks will be provided. For more information, contact Vilja Zmuidzinas at vilia@caltech.edu or (626) 398-4413 or Brenda Simmons at l.simmons@att.net or (818) 790-6867. For information about the club, visit <http://www.cwclub.caltech.edu>.

“Market-Based Systems: Bidding Your Way to the Launch Pad”—Ever notice that resource allocation problems all have the same characteristics? Join Dr. Randii Wessen at 11:30 a.m. in the 167 conference room for this Systems Engineering Advancement seminar.

Saturday, November 5

Celtic Music—The Battlefield Band will perform at 8 p.m. in Caltech’s Beckman Auditorium. Tickets are \$29, \$25 and \$21; \$10 for high school age and younger. For more information, call (626) 395-4652 or visit www.events.caltech.edu.

Monday, November 7

New Project Scientist Discipline—A briefing on the career path for scientists to develop into project scientists will be held at 10 a.m. in Building 180-101.

Tuesday, November 8

JPL Stamp Club—Meeting at noon in Building 183-328.

Wednesday, November 9

JPL Amateur Radio Club—Meeting at noon in Building 238-543.

JPL Library Orientation—Stop by Building 111-104 at 11:30 a.m. for an overview of the Library’s products and services, and learn how to access numerous electronic resources from your desktop. For more information, call the reference desk, ext. 4-4200.

JPL Toastmasters Club—Meeting at 5 p.m. in conference room 167. Call Dirk Runge, ext. 3-0465, or visit www.jplcaltechtostmasters.com.

“Luck, ESP and Magic: How Science Tests the Unusual”—Dr. Richard Wiseman, author of “Magic in Theory: An Introduction to the Theoretical and Psychological Elements of Conjuring,” will appear at 7 p.m. in Caltech’s Baxter Lecture Hall. The event is sponsored by the Skeptics Society. For information, call (626) 794-3119 or e-mail skepticmag@aol.com.

Thursday, November 10

Mark Zuckerberg—The creator of Thefacebook.com will speak at 8 p.m. in Caltech’s Beckman Auditorium. As a Harvard student, Zuckerberg developed the online directory that con-

nects people through social networks on colleges. Free admission. For more information, call (626) 395-4652 or visit www.events.caltech.edu.

Friday, November 11

Mad Chad—The chainsaw-juggling comedian will perform at 8 p.m. in Caltech’s Ramo Auditorium. Tickets are \$20; high school age and younger, \$10. For more information, call (626) 395-4652 or visit www.events.caltech.edu.

Saturday, November 12

Toying With Science—This family program, originally commissioned and produced with the Museum of Science in Boston, explores the scientific principles of gravity and leverage, simple machines, human imagination and more. It will be held at 2 p.m. in Caltech’s Beckman Auditorium. Tickets are \$12 for adults, \$7 for children. For more information, call (626) 395-4652 or visit www.events.caltech.edu.

Tuesday, November 15

JPL Hiking Club—A slide show titled “The Geology of JPL” will be presented by Tom Farr at noon in Building 171-218.

Wednesday, November 16

“Einstein’s General Relativity, from 1905 to 2005: Warped Spacetime, Black Holes, Gravitational Waves and the Accelerating Universe”—Kip Thorne, Caltech professor of theoretical physics, will speak at 8 p.m. in Beckman Auditorium. Free admission. For more information, call (626) 395-4652 or visit www.events.caltech.edu.



JPL Library Orientation—Stop by Building 111-104 at 11:30 a.m. for an overview of the Library’s products and services, and learn how to access numerous electronic resources from your desktop. For more information, call the reference desk, ext. 4-4200.

Wed.-Thu., November 16-17

Investment Advice—TIAA/CREF will offer one-on-one counseling in room T1720. For an appointment, contact TIAA/CREF online at www.tiaa-cref.org or at (626) 432-6363.

Thursday, November 17

Caltech Architectural Tour—Hosted by the Caltech Women’s Club, from 11 a.m. to 12:30 p.m. Free and open to the public. Meet at the Athenaeum front hall, 551 S. Hill Ave. For reservations, call Susan Lee, (626) 395-6327.

Clogging Class—Meets at noon in Building 300-217. For more information, call Shary DeVore at ext. 4-1024.

Thu.-Fri., November 17-18

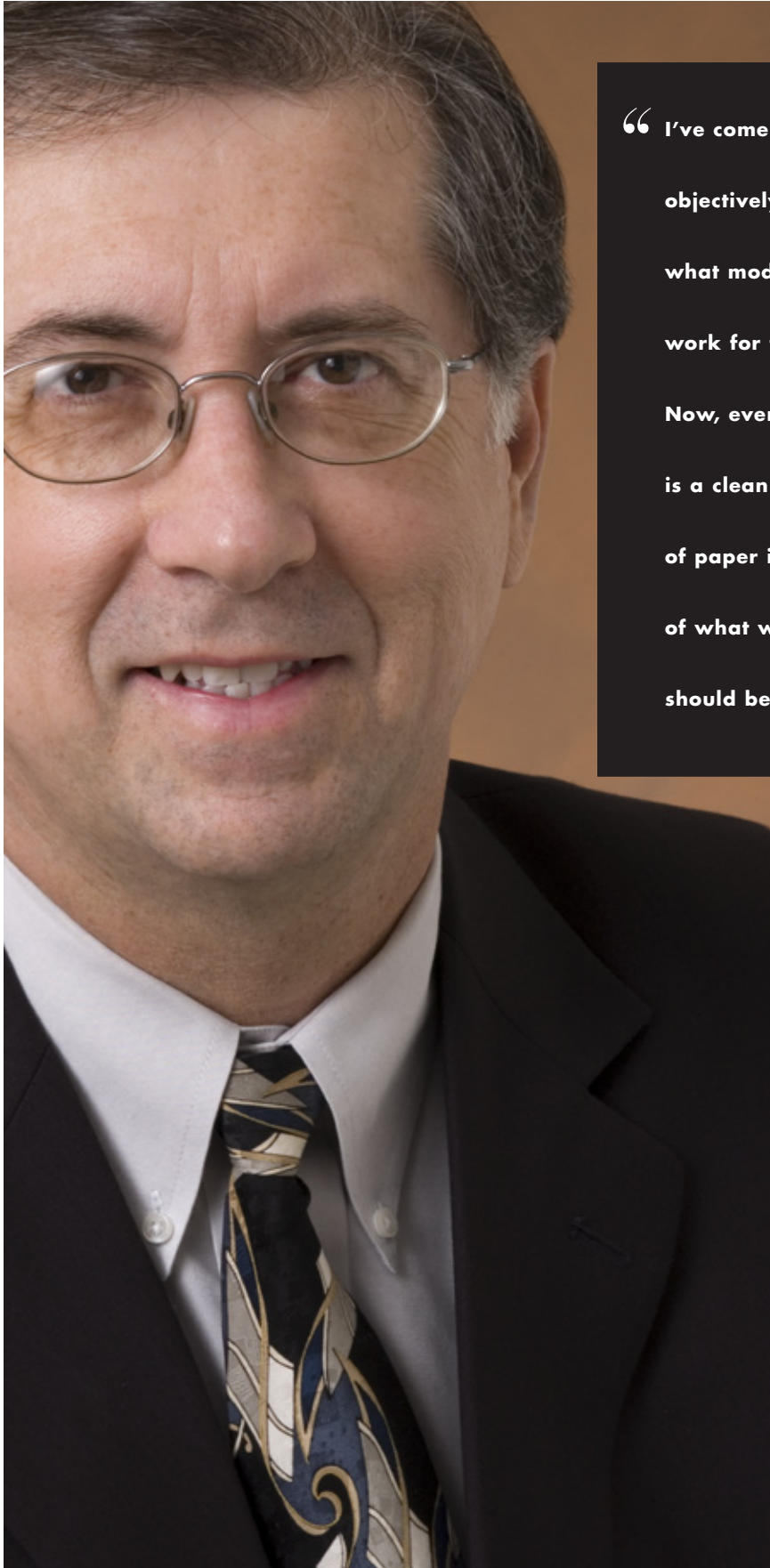
Von Kármán Lecture Series—Join Dr. Bonnie Buratti, JPL principal investigator and science team member on the New Horizons mission to Pluto, for “From Darkness to Light: The Exploration of the Planet Pluto” at 7 p.m. Thursday in von Kármán Auditorium and Friday in Pasadena City College’s Vosloh Forum, 1570 E. Colorado Blvd. Thursday’s lecture will be web-cast at <http://www.jpl.nasa.gov/events/lectures/nov05.cfm>. For more information, call Public Services at ext. 4-0112.



Meet JPL's new IT man

by Mark Whalen

JPL Chief Information Officer James Rinaldi joined the Lab in late August. He brings more than 25 years of experience in developing information technology strategies for both government and corporate organizations, including the U.S. Food and Drug Administration, Internal Revenue Service and Marriott International. Rinaldi recently spoke with Universe about his new role.



Tom Wynne/JPL Photolab

“ I’ve come to JPL objectively, to see what model will work for the Lab. Now, everything is a clean sheet of paper in terms of what we should be. ”

What are the chief information officer’s roles and responsibilities?

My role is to have accountability for all information technology (IT) services across the Lab. That ranges from technology infrastructure like networking, e-mail and calendaring to systems and application development, Web development and strategic planning for IT.

In developing our strategy and planning we’ll be looking at which technologies we are going to adopt and how they fit with the needs of the Lab, both functionally and as financial investments. For example, a strategy could be integrating data across the Lab. How do we get decision-making data to the right people? That’s part of our accountability.

Have you developed any strategic goals yet?

Not yet. Since I’m new, the first thing I need to do is understand what the Lab needs. Since I’m on the Executive Council, I get to see from the highest level how the Lab operates and the direction the Lab is going, and then I can align the IT strategy to meet that. I’m doing a lot of “meet and greet,” trying to see how IT works, how decisions are made.

As I better understand the organization over the next several months, I’ll be making a lot of recommendations. We’ll consider things such as reducing redundancies in our technology, perhaps consolidating and combining Web portals, and consolidating servers.

One thing I know I’d like to do eventually is to develop a vision for IT at JPL and communicate that vision across the Lab. Also, it’s my goal to have those of us in IT always think as our customers do, and tailor our services accordingly.

I’m sure we won’t please everybody, but we’re here to do the right thing for the Lab, to help it be as successful as it can be.

How will your background and experience fit in at JPL?

Prior to coming to JPL I was the chief information officer at the Food and Drug Administration, for three years. There are some similarities and some obvious differences between the environments at JPL and the FDA. The FDA is a regulatory agency but it is composed of doctors and scientists who cover most aspects of healthcare.

Like JPL, it’s science based, with an academic feel. Information technology was decentralized, and I succeeded in consolidating the entire IT organization and created much more transparent decision-making.

Is that necessarily a strategy that we need here?

I don’t know yet. I’ve come to JPL objectively, to see what model will work for the Lab. Now, everything is a clean sheet of paper in terms of what we should be.

Currently, there’s a lot of change going on, especially with NASA. I see a great opportunity for the IT community to position our services so that JPL can not only go after new work but can continue to be successful in the work that it has. I think our role as a support organization will be critical to that future.

How much of an issue is IT security?

At JPL we’re custodians of a lot of critical data, and security for that data and for our services is very important and will continue to grow in importance. Technology shifts so fast that we have to stay on top of it to maintain our level of security to protect our data, which is spread across multiple platforms. We have to continuously monitor for intrusion detection to make sure our networks and servers are secure, and to make sure critical data is backed up and stored properly.

The other role of security is to make sure that the right access is given to the right people. Not all data is available to everyone, so access rights and policies have to be continuously monitored, updated and executed.

Have recent staff and budget reductions affected the IT organization?

We’re obviously concerned about the effect on services. We feel that we will work through the staff reductions without hitting services and we’re trying to anticipate what we can do — it comes down to doing more with less.

None of it is without pain, but we understand the necessity and the drivers for it, and we just have to be creative and take care of our people and move forward. IT people tend to be problem solvers by nature and we have to find new ways to function.

And we can continue to leverage the services we already have in place to create new systems, etc. For example, we use our intranet to deliver all kinds of functions such as timekeeping and Just In Time. We’re going to continue to build on that.

You’ve been on board for a couple of months now. What are your first impressions of JPL?

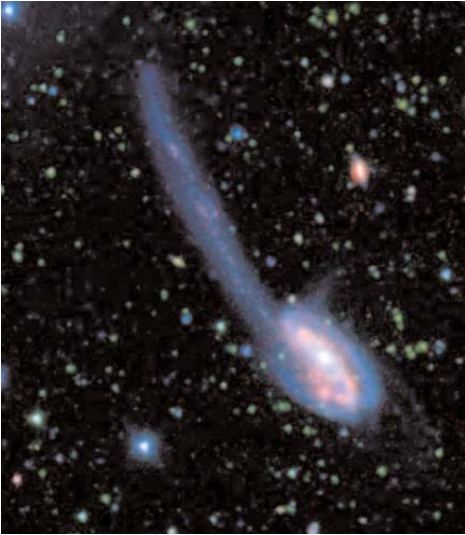
Having gone through the interview process, I had a good feel for what it would be like. First of all, I’m very impressed with JPL. It’s a very exciting place. I don’t necessarily understand all the science that we do, but I’m eager to learn and understand as much as I can.

The people here are some of the nicest people I’ve ever met. People are willing to help and to share information, and have been extremely supportive. It was a very complex move for my wife and me to move across the country from Maryland, but I’m very impressed with the amount of support I’ve been given, from all corners of JPL.

There is so much that JPL does right, and I’m so happy I didn’t have to come in here and fix something that’s broken. What attracted me to JPL was that I could come here, take what’s already been done and just move forward as JPL moves forward.

I think the people are the strongest assets we have. The IT we provide here is very good, I think there are opportunities, and my job is to make good decisions on the opportunities we go after.

Picture is worth billions of years



This image of the Tadpole galaxy, taken by the Spitzer Wide-area Infrared Extragalactic Legacy project, is the result of a recent galactic interaction in the local universe. Although these galactic mergers are rare in the universe's recent history, astronomers believe that they were much more common in the early universe. Visit <http://photojournal.jpl.nasa.gov/catalog/PIA03543>.

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- Universe is not responsible for the quality of merchandise sold or claims made through its ads.
- Ads are for the exclusive use of JPL and Caltech employees, contractors and retirees, and their immediate families.
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- Only home phone numbers and e-mail addresses are to be used for items for sale or rent and in the Wanted and Free sections; work extensions may be published for Lost and Found and carpool/vanpool information only.
- No more than two ads of up to 60 words each will be published for each advertiser.
- E-mail ads to universe@jpl.nasa.gov.
- No faxes, handwritten ads or photocopies of ad cards are accepted, with the exception of submissions for the Letters column. Also, ads are not taken over the telephone.
- Unless otherwise noted in Universe, the

normal deadline is the Monday following publication, at 2 p.m., for the next issue.

• We ask that readers not submit ads for “work sought,” such as babysitting or house-keeping services or other types of private businesses. Also not acceptable are ads for franchises, dealerships, distributorships, etc., and products sold through those means.

• Ads for weapons, ammunition, etc. are not accepted.

• Real estate ads (for rent and sale) must be signed on the back of ad cards (non-discrimination clause). E-mail ads will be returned to advertisers with this clause included for your “electronic” signature. Those placing housing and vehicle ads should be listed as an owner on the ownership documents.

• Prices listed on rental ads are shown per month unless otherwise specified.

• Telephone numbers on ads are in the 818 area code unless otherwise specified.

Thank you very much for your compliance.

JPL'S ONLINE NEWS SOURCE



<http://dailyplanet>

E-mail us at

universe@jpl.nasa.gov

Passings

EUGENE BROWER, 46, Mars Global Surveyor Mission Manager for the past few years, died Oct. 22. Brower had worked at JPL since 1983. He served as the Mars Surveyor Office flight operations engineer, command engineer and mission controller for Galileo, and network controller for the Deep Space Network. Brower is survived by his father, Cecil; mother, Giovanna; wife, Leticia Montanez; a grandmother and cousins. Memorial services were held at St. Philip the Apostle Church in Pasadena.

Letters

Alison and I would like to thank our colleagues and friends for their cards of condolences and prayers and to JPL for a beautiful plant after the passing of my mother. Thank you for all your words of support.

John and Alison Ziats

I would like to extend heartfelt thanks to my extended JPL family for all the love, support and overwhelming generosity they have shown my son and myself upon the death of my husband, Gary. You have helped us get through a terribly traumatic time and I feel so very blessed to know and work with you all. You people are the best!

Stephanie and Colin Cowans

My family and I send our heartfelt thanks to our JPL family following the recent passing of my father. Your kind cards, notes and the beautiful peace lily plant are so encouraging to us during this time.

Chuck Holler and family

Giovanna and I would like to offer our heartfelt thanks to all our friends and colleagues at JPL for the cards, plants and thoughtful expressions of hope and condolences we received at the recent passing of our son Gene. Your kindness has meant so much to us. A special thanks to his wife Leticia and those who took time to see him and care for him during his short illness. We are all part of one great family at JPL and will remain so. Gene will be missed.

Cecil W. Brower

Classifieds

For Sale

BABY CRIB, including mattress, can be converted to a day bed, bought 2 years ago, \$250 value, sell for \$100. 626/574-7431. BABY CRIB, ChildCraft brand, natural light wood finish, vg condition, mattress not included, \$35. 626/351-8643.

BICYCLE: boys 20" GT Dyno, excellent cond., \$65. 626/798-1839.

CAMCORDER, Samsung Digital Video, SCD27, brand new, large swivel 3.5" LCD, video/S/DV/USB outputs, w/lithium ion battery, charger, remote control, nylon carrying case, 3 x 90 minute tapes, original box and instruction book, \$300 firm. 626/825-6480.

CAMERA, Olympus 230 zoom, 35 mm film, 38-90 mm zoom lens, auto-focus, date/time, auto flash, close focus, nylon case, remote, excellent condition, \$60; LIGHT METER, Gossen Luna-Pro, German made, leather case, great cond., \$50, Nikon metering penta-prism, for F series cameras, \$25. 626/825-6480.

CHAIRS (4), authentic Hitchcock Nicholas Stone, all in excellent condition, \$400. 626/797-6472, Helen Swanson.

COMPUTER WORKSTATION: accomm. all your equipment in a small space; wooden, lt. brown unit to fit PC/printer/CD+DVDs; pullout shelf for keyboard & mouse pad; leave your e-mail address for a picture, \$20/obo. 626/793-3408.

DANCE TICKETS (2) for Alvin Ailey American Dance, Dorothy Chandler Pavilion, Feb. 22, 7:30, seats in founders circle, \$135. 790-8523.

DAY BED, has mattress + box spring, white frame, \$50. 626/351-0348.

DOGGY DOOR, size large, fits into sliding glass door frame, exc. cond., \$25. 661/254-7443.

DRYER, electric, excellent cond., \$75/obo, you pick up. 626/446-1748.

ESTATE SALE: whole house must go; 5-pc. lt. oak bedroom set, \$2,000; Spinet piano, maple, \$600; patio table w/glass top + 4 chairs, \$300; tools of all sorts, various prices, much more; sale scheduled for 11/12, all items to be sold by then. 248-0491.

EXERCISE MACHINE, like Bowflex Max, but uses 6 calibrated bungee cords for tension, for workouts from neck to feet, vg cond.; \$375/obo. 626/794-1050, Harry, eves.

EXERCISE MACHINE, Weider 8510 Home Gym System, \$100. 243-8255.

JEWELRY, ladies 18K YG diamond cross pendant (.75 tcw of baguettes and round diamonds) w/17" YG chain, paid \$310, sell for \$110. kar10026@hotmail.com.

KEYBOARD, Fender amplifier, percussion, Altec Lansing speakers, \$350; ACCORDION, \$50. 626/797-6472, Helen Swanson.

LAWN MOWER, Sears Craftsman, 20", 3.5 HP, runs well, \$30. 626/241-7084, Steve.

LAWN MOWER, gas, \$60/obo. 626/914-7853.

MOUNTAIN BIKE, Haro Escape, 21 spd., Shimano gears, \$150/obo. 909/319-8338, Paul.

OPERA TICKETS (2), L.A. Opera Madame Butterfly, Feb. 1, '06, 7:30 p.m., \$35/ea. 352-3244.

PICTURE, Paradise Waterfall, 46" x 29", moving water & bird sounds (volume control), creates the illusion of moving water, \$150/obo. 653-9037.

SANDER, Porter-Cable random-orbit (5"), model 333K, incl. case, brand new, never opened, \$50 (\$65 on Amazon). 353-4400, Brian.

SINKS for bathroom, Overmount, white, excellent cond., \$10. 626/646-1937.

SOFA and chaise sectional, white, exc. cond.: was \$2,000, now \$150. 626/646-1937.

TRAVEL CRATES (2) for large dogs, Petmate Deluxe Vari Kennels, extra lg., 40" L x 27" W x 30" H, approved for airline travel, \$60/each. 790-0697.

TROPICAL PLANTS, plumerias, variety of colors and sizes; shell gingers. 626/444-6156.

Vehicles / Accessories

BMW 18" dia., 10 dbl.-spoke M Wheels (OEM) w/ Michelin tires (Pilot Sport), staggered 18 x 8 front & 18 x 8.5 rear, wheels & tires are in great cond. except for minor nick on 1 wheel, \$1,800/obo. 310/600-8736, Carl or Alizabeth. '02 BMW 325i, 4-dr. sedan, 2.5 inline-6, 5-sp, manual, pwr. locks/mirrors/windows, CD, iPod adapter, keyless entry & alarm, white on sand leatherette, exc. cond., only 22K mi., free maintenance until 48K miles, \$21K. 626/449-0997. '68 CHEVY Camaro SS, 350 hp, 49,000 miles, clean int., eng. runs great, a restoration/st. rod project I am unable to complete, front right replacement fender is in primer color, add new paint and you have a fantastic car, see www.sassybee.com/camaro, \$13,000/obo. 310/445-6625, Steve.

'01 DODGE Intrepid SE, exc. cond., only 25K mi., 4 dr., silver exterior, charcoal fabric interior, automatic, a/c, \$8,500. 626/644-0251, Alex.

'64 DODGE Dart 270 Classic (Dodge 50th anniv. yr.), exc. cond., 4 dr., gold, auto trans, pwr. steering, slant 6, new tires, 140,700 miles (70K on rebuilt motor/15,893 at purchase in '65), have all maint. receipts & owner's manual, \$3,900/obo. 626/449-6698, Kathie.

'02 FORD Mustang convertible, prem. V6, 39K mi., exc. cond, yellow w/white top, leather, pwr. evrything, 6-disc CD, ABS, traction control, a/c, spoiler, chrome wheels, new tires, 2 yrs. on premium warranty, \$15,500. 248-5210, Peter.

'96 HARLEY Custom Rigid, rigid frame by Atlas, 80CI S&S, 3" drivebelt, 5-spd. trans, 180 rear tire, 21" front wheel, custom forward controls, a great bike, lots of attention, is registered and I have pink, \$13,000/obo. 626/497-9591, Gene or guido576@yahoo.com.

'05 HONDA Civic Hybrid, 21K mi., airbag, abs, a/c, ps, cc, tilt, power steering/windows/mirrors/door locks, tint, am/fm, 45 mpg, vg cond., fac. warranty, silver, carpool stickers are included, \$19,900. 909/913-1768.

'93 JEEP Cherokee, 4-wheel drive, 4 door, 160,000 miles, \$1,000/obo. 249-6629.

'95 LAND ROVER Range Rover SE V8 4.0 L, auto, 4WD, 138K, tan, leather seats, CD, ps, pw, dual airbags, moonroof, runs great, good condition, \$6,100/obo. 626/296-9073 or 818/515-2461.

'89 LAZY DAZE RV, 26.5', 30K miles, sleeps 6-8, a/c, awning, microwave, oven, refridge, loaded with extras, no accidents, looks/runs great, \$15,250/obo. 248-0491.

'02 LEXUS IS 300, 36K miles, loaded, auto, 6-CD changer, GPS navigation system, everything power, moonroof, leather power seats, spoiler, good condition, \$21,500. 909/599-3230.

'02 NISSAN Xterra Sport Utility, V6, alloy wheels, hitch, 45,400 miles, \$15,500/obo. 909/982-5107.

'97 NISSAN Maxima, white, auto, full power, 4 door, 90K mi, in perfect shape, \$5,200/obo. 249-7946, Greg.

'99 SAAB 9-5, 106K mi, airbag, abs, a/c, cc, tilt, lthr, pwr. seats/steering/windows/mirrors/dl, tint, stereo, sunroof, SE model, Swiss built, 32 mpg hwy, turbo, sport mode, very clean car, no accidents, detailed service records avail., good tires, \$7,800. 310/936-4664.

'85 SAAB 900 4-dr sedan, ~180,000 miles, single owner, cosmetic defects, runs well for old car, \$500. 626/644-5558, Larry.

THULE ADVENTURE vehicle travel top, enclosed with locks and Yakima Rack System for roof rails, like new. \$175; CANBACK canvas shell (black) for a Ford Super Duty truck, \$200. 909/319-8338, Paul.

'99 VW New Beetle GL, black, auto, 67K, keyless entry & alarm, 16" alloy wheels, new front tires, new brakes, front airbags, pwr. windows/door locks/mirrors, fog lamps, \$6,500/obo. 310/575-3030.

'02 YAMAHA YZ 426F dirt bike, exc. cond., well maintained, \$3,200. 626/351-9644, David.

Free

DISNEYWORLD MEAL VOUCHER, good for one meal at selected counter-service restaurants in all parks, exp. 12/31/05. fourlock@earthlink.net.

Wanted

BLACKSMITH TOOLS: anvil, forge, tongs, leg vise, etc. 626/798-6588.

BRICKS, used, loose, in good condition, will haul away; HOT WHEELS from Mattel, 1960s and '70s. 626/241-7084, Steve.

MATH TUTOR, jr. & sr. high school level classes (geometry, pre-algebra, algebra I & II, SAT math, etc.), eves and/or weekends; also English tutors. 888/784-1639, David, leave msg.

MEMBERS of Philanthropic Educational Organization who are also JPLers. 626/797-1058, Linda or 626/449-8392, Mary.

SPACE INFORMATION/memorabilia from U.S. & other countries, past & present, for personal use. mrayman@alumni.princeton.edu. 790-8523, Marc Rayman.

VIOLIN, full-size. 626/447-5083.

VOLLEYBALL PLAYERS, coed, no beginners please, Tuesdays 8 to 10 p.m. at Eagle Rock High School, \$4/night. 956-1744, Barbara.

For Rent

ALHAMBRA house, 2,000 sq. ft., 2 bd., 1 ba., exc. cond., quiet neighborhood, 20 min./JPL, \$2,000 including utilities. 626/297-5412.

ARCADIA, large studio guest house, detached, separate entry, kitchenette, laundry facilities, no pets, non-smokers, shared utilities, \$850. 626/441-0041.

ARCADIA apt., 2 bd.+den/1 ba., garage, upstairs unit, clean, spacious; washer/dryer in unit, a/c, stove; walking distance to shops, near SA Fashion Park; quiet residential neighborhood, close to JPL; no pets; water/gardener/trash included; \$1,450 + utility, security deposit. 626/576-7333 or clm@mcw.edu.

LONG BEACH house, 3 bd., 1.75 ba., in desirable & quiet Plaza neighborhood, near Cal State LB; 2-car garage, front & back yard, no pets/no smoking, \$1,749. 562/420-2313.

N. GLENDALE townhouse, 2 bd., 2.5 ba., large master suite, hardwood floors, storage/light, no smokers/pets, \$2,050. 541-7510 (W) or 634-1097 (cell), Poli.

N.E. PASADENA, 3 bd., 2 1/2 ba., den or office, Indry rm., fireplace, brdwd. flrs, 2-car gar. 626/794-3906.

PASADENA home for lease, 2 bd., 2 ba., large kitchen, lots of storage, laundry hookup, stove, refrig., gardener, enclosed back yard, huge 2-car garage, near Caltech and vicinity, no pets, no smokers, \$1,500. 626/794-0455.

PASADENA house, 3 bd., 2 ba., 2-car garage, 3 mi. from JPL in historic Highlands area, quiet area near foothills, private yard, stove/frig, washer/dryer, dishwasher, fireplace, water/gardener/trash included, avail. 11/15, 1-yr. lease, \$1,950 + security deposit. 310/403-0620.

Real Estate

PASADENA condo, 2 bd., 2 ba., located in the most desirable area of Old Town, south of the 210 on Marengo betw. Del Mar & California; walking distance to all shopping, 1 block away from the Metro Goldline station, 5-minute drive to JPL; built in 1993, 1,227 sq. ft., turnkey unit; \$530,000. 626/793-3408.

Vacation Rentals

BALBOA ISLAND, cute, 2 bd., 1 ba. fully furnished upstairs apt. w/covered deck, just steps from the bay on Little Island & a short walk to the main st.; includes laundry, sleeps 5, available at winter rates of \$95/nite. 626/351-9641 or betttyrs@earthlink.net.

BIG BEAR LAKEFRONT, luxury townhome, 2 decks, tennis, pool/spa, beautiful master bd. suite, sleeps 6. 949/786-6548.

FLORIDA condo, beautifully furn. 2 bd., 2 ba., 2nd floor, on the surf of New Smyrna Beach, half-hour to Cape Canaveral, 90 min. to Disney World; enjoy all the comforts of home, quiet, relaxing, overlooks beach, BBQ/pool/ game room, easy walk to stores and restaurants. 760/439-7821, Darlene, dfhaug@yahoo.com.

GRAND TETON / YELLOWSTONE Nat'l Parks, visit in style, 2 bd. + loft townhome, totally outfitted, stunning Teton view, sleeps 6, cable, microwave, etc., borders Grand Teton. conniematt@scgglobal.net.

LOCAL & WORLDWIDE, 5-star resorts, luxurious residential-style 1-bd. villas w/fully furn.d kitchen & living room, starting at \$690/wk.; sleeps 4; local resorts incl. Marriott/Palm Springs, Welk Resort/ Escondido, Marriott/Lake Tahoe & Marriott/Colorado Rockies. 626/794-9579 or fivestarresorts@earthlink.net.

MAMMOTH, Snowcreek, 2 bd., 2 ba., + loft, slps. 6-8, fully equip'd kitchen incl. microwv., D/W, cable TV, VCR, phone, balcony w/mtn. vv., Jacz., sauna, streams, fishponds, close to Mammoth Creek, JPL disc'tn. 626/798-9222, 626/794-0455 or valeriecc@caltech.edu.

OCEANSIDE condo, on the sand, charming 1 bd., panoramic view, walk to pier or harbor, pool, spa, game rm., sleeps 4. 949/786-6548.

ROSARITO BEACH condo, 2 bd., 2 ba., ocean view, tennis, short walk to beach on priv. rd., 18-hole golf course 6 mi. away, priv. secure parking. 626/794-3906.

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Congress approves NASA funding bill

Congress this week passed a NASA budget for fiscal year 2006 that includes \$16.456 billion for the space agency. Both houses of Congress approved the bill, which was headed to President Bush’s desk for his signature.

“I offer my sincere thanks to the House and Senate for endorsing and funding, for the second straight year, our activities to implement America’s Vision for Space Exploration,” NASA Administrator Michael Griffin said in a statement. “NASA’s FY 2006 funding bill of \$16.5 billion—0.7 percent of the federal budget—will enable continued space shuttle operations and International Space Station assembly; initiate development of the next generation Crew Exploration Vehicle and Crew Launch Vehicle; and support key science and aeronautics programs vital to our nation.”

The bill provides \$1.55 billion for JPL, including funding for two key programs, the Space Interferometry Mission (SIM) and the Mars Exploration Program. A House–Senate conference committee voted last week to fund \$119 million for SIM and \$680 million for Mars. President Bush is expected to sign the bill, said Dr. Rich O’Toole, manager of JPL’s Legislative Affairs Office.

“At this point, the main issue is that legislators added about \$280 million in ‘earmarks’ (directed spending for specific programs) to the bill that NASA will have to find a way to pay for,” said O’Toole. “After the president signs the bill, NASA has 60

“The bill provides \$1.55 billion for JPL, including funding for two key programs, the Space Interferometry Mission (SIM) and the Mars Exploration Program.”

days to deliver an operating plan. So the congressional action is very encouraging, but the budgetary process is not completely concluded yet.”

Another issue for the federal budget is the question of how to pay for the aftermath of Hurricane Katrina. One possibility under consideration, O’Toole said, is an across-the-board cut to non-defense discretionary programs, including NASA.

“We still have some long-term challenges,” O’Toole said. “NASA is still faced with a very difficult budget-planning problem over the next five years, as Administrator Griffin tries to develop the crew exploration vehicle to replace the space shuttle.

“We will know more about NASA’s situation for 2007 and beyond when the FY ’07 budget request is released in February. That will give us a clue about whether the Office of Management and Budget has given enough funds to accommodate NASA’s plans for the crew exploration vehicle development.”

In the funding bill, Congress also directed NASA to include a new start for a robotic mission to Europa in the fiscal year 2007 budget request.

Spitzer sees blaze of star formation

By Whitney Clavin

Towering pillars of cool gas and dust are illuminated at their tips with light from warm embryonic stars.
(NASA / JPL-Caltech / Harvard-Smithsonian)



A new image from the JPL-managed Spitzer Space Telescope reveals billowing mountains of dust ablaze with the fires of stellar youth.

Captured by Spitzer’s infrared eyes, the majestic image resembles the iconic “Pillars of Creation” picture taken of the Eagle Nebula in visible light by NASA’s Hubble Space Telescope in 1995. Both views feature star-forming clouds of cool gas and dust that have been sculpted into pillars by radiation and winds from hot, massive stars.

The Spitzer image, which can be found at www.spitzer.caltech.edu/Media, shows the eastern edge of a region known as W5, in the Cassiopeia constellation 7,000 light-years away. This region is dominated by a single massive star, whose location outside the pictured area is “pointed out” by the finger-like pillars. The pillars themselves are colossal, together resembling a mountain range. They are more than 10 times the size of those in the Eagle Nebula.

The largest of the pillars observed by Spitzer entombs hundreds of never-before-seen embryonic stars, and the second largest contains dozens.

“We believe that the star clusters lighting up the tips of the pillars are essentially the offspring of the region’s single, massive star,” said Dr. Lori Allen, lead investigator of the new observations, from the Harvard-Smithsonian Center for Astrophysics, Cambridge, Mass. “It appears that radiation and winds from the massive star triggered new stars to form.”

Spitzer was able to see the stars forming inside the pillars thanks to

its infrared vision. Visible-light images of this same region show dark towers outlined by halos of light. The stars inside are cloaked by walls of dust. But infrared light coming from these stars can escape through the dust, providing astronomers with a new view.

“With Spitzer, we can not only see the stars in the pillars, but we can estimate their age and study how they formed,” said Dr. Joseph Hora, a co-investigator, also from the Harvard-Smithsonian Center for Astrophysics.

The W5 region and the Eagle Nebula are referred to as high-mass star-forming regions. They start out as thick and turbulent clouds of gas and dust that later give birth to families of stars, some of which are more than 10 times more massive than the sun. Radiation and winds from the massive stars subsequently blast the cloudy material outward, so that only the densest pillar-shaped clumps of material remain. The process is akin to the formation of desert mesas, which are made up of dense rock that resisted water and wind erosion.

According to theories of triggered star formation, the pillars eventually become dense enough to spur the birth of a second generation of stars. Those stars, in turn, might also trigger successive generations. Astronomers do not know if the sun, which formed about 5 billion years ago, was originally a member of this type of extended stellar family.

Allen and her colleagues believe they have found evidence for triggered star formation in the new Spitzer image. Though it is possible the clusters of stars in the pillars are siblings of the single massive star, the astronomers say the stars are more likely its children.

Luis Chavarria is also a member of the investigating team at the Harvard-Smithsonian Center for Astrophysics. This research was originally led by Dr. Lynne Deutsch of the Center for Astrophysics, who passed away April 2, 2004.

For graphics and more information about Spitzer, visit www.spitzer.caltech.edu/spitzer.

News Briefs



Tom Wynne / JPL Photolab

Dr. Max Coleman, right, shows the Isotope Lab to Dr. Erik Antonsson and Dr. Charles Elachi.

Isotope Lab dedicated

The Stable Isotope Laboratory (IsoLab) was dedicated earlier this month in Building 233. According to DR. MAX COLEMAN, director of the Center for Life Detection and supervisor of the Astrobiology Research Group (3226), the lab was established to undertake a relatively routine but high-tech analytical approach to measurement of the small but significant natural variations in abundances of stable (non-radioactive) isotopes. The data produced can give, for example, information on where a chemical element came from to produce the material being analyzed; temperatures of formation of minerals; or chemical reactions produced by a sample being analyzed (e.g., an organism's metabolism or a non-biological process).

laboratory instrument for calibration of these measurements. "This was not the main reason for establishing the lab; rather, its aim is to develop new approaches to detecting the presence or former existence of life for planetary exploration as part of the astrobiology research program."

Cerf receives presidential honor



JPL Advisory Council member and Distinguished Visiting Scientist DR. VINT CERF has received the Presidential Medal of Freedom, the nation's highest civilian award. In a White House ceremony earlier this month, Cerf and DR. ROBERT KAHN were honored for jointly designing the architecture and communication protocol that gave rise to the modern Internet. In answer to a question during an "Ask the White House" online forum about which current project he is most passionate about, Cerf said, "The interplanetary Internet project at JPL because it is as close as you can come to living a science fiction story."

United Way campaign extended

JPL's United Way campaign has been extended to Friday, Dec. 2. For information, visit www.united-wayla.org or call United Way coordinator NANCY KAPELL, ext. 4-9432.

3 honored as JPL fellows



Tom Wynne / JPL Photolab

From left: Joe Savino, Duncan MacPherson, Dr. Charles Elachi, Gentry Lee.

Gentry Lee, chief engineer for the Solar Systems Exploration Directorate, Duncan MacPherson of the Project Prometheus Office and Joe Savino of the Autonomous Systems Division attended a recent ceremony in recognition of Savino's appointment to the position of JPL Fellow. Lee and MacPherson were named JPL Fellows in 2003. Lee and MacPherson were honored "in recognition of [their] depth and breadth of expertise in space systems engineering and [their] ability to apply that across the spectrum of capabilities related to JPL space exploration missions." Savino was recognized for his "extraordinary depth and breadth of expertise in spacecraft systems and uncommon engineering judgment that have benefited JPL deep-space exploration missions spanning several decades." Lee, who also works in the Project Support Office (160), previously was chief engineer for the Galileo Project, and director of science analysis and mission planning for the Viking Project. MacPherson was a consultant to JPL for about 20 years before joining the Lab as an employee in 2003. He has participated on numerous project-level and other review boards for most of JPL's planetary missions and most recently worked as chief engineer for the Jupiter Icy Moons Orbiter project. Savino joined JPL in 1956. In recent years he has served on about 200 review boards and advisory teams in support of JPL missions. The fellow designation is the top rung of JPL's technical career ladder, said Kris Koliwad, chief technologist for the Engineering and Science Directorate, who served as the facilitator to the Fellow Promotion Advisory Board. "Fellows will be sought out for advice on strategic technical decisions on missions, systems and projects as well as future directions in research and technology," he said. "These are very rare individuals, indeed."

Scientists have new career path options

By Mark Whalen

JPL scientists now have more options for career success with the development of a new project scientist career path. Previously, science research had been the only formal career path for scientists at JPL. Now, those who aspire to leadership roles on science teams for JPL missions have a set of standards and expectations to follow. "Scientists at JPL have always worked on projects and missions, and have assumed roles ranging from data planning and instrument representation, all the way up to the Project Scientist role, leading the science for JPL, but without a clearly defined, or formalized, career path," noted Dr. Bill Langer, manager of the Science Division. "Under the new program, they will have a separate career path with its own set of career levels." The Project Scientist is a separate discipline in the Program/Project Manager job family that includes principal investigators, co-investigators, deputy project scientists and investigation scientists. Project scientists are responsible for the scientific integrity of an assigned or competed project and mission with impact to mission cost, schedule and performance. Investigation and staff scientists report to them, and project scientists also lead the activities of a science team that often includes key individuals outside of JPL. Other expectations in the discipline include influencing project design and making decisions on project science tradeoffs from proposal through operations phases; being the scientific spokesperson for the project and investigators; and chairing the project science group for the mission. The new system formally defines levels of responsibility so that staff are better positioned to become deputy project scientists or project scientists. With defined roles and accountability, people can plan their career choices and be mentored in a more effective manner than in the past. "A defined job discipline helps Human Resources and line managers identify employees who are in different jobs at the Lab. That's important when

Special Events Calendar

Ongoing Support Groups

Alcoholics Anonymous—Meets Wednesdays at 11:30 a.m. Caregivers Support Group—Meets the first Thursday of the month at noon in Building 167-111 (the Wellness Place).

Codependents Anonymous—Meets at noon every Wednesday. Lambda (Gay, Lesbian, Bisexual and Transgender Networking Group)—Meets the first Friday and third Thursday of the month at noon in Building 111-117. For more information, call Randy Herrera, ext. 3-0664.

Parents Group for Children With Special Needs—Meets the second Thursday of the month at noon in Building 167-111 (the Wellness Place). For more information on any of the support groups, call the Employee Assistance Program at ext. 4-3680.

Wednesday, November 23

JPL Library Orientation—Stop by Building 111-104 at 11:30 a.m. for an overview of the Library's products and services, and learn how to access numerous electronic resources from your desktop. For more information, call the reference desk, ext. 4-4200.

JPL Toastmasters Club—Meeting at 5 p.m. in conference room 167. Call Dirk Runge, ext. 3-0465, or visit www.jplcaltechtostmasters.com.

Wednesday, November 30

JPL Library Orientation—Stop by Building 111-104 at 11:30 a.m. for an overview of the Library's products and services, and learn how to access numerous electronic resources from your desktop. For more information, call the reference desk, ext. 4-4200.

Thursday, December 1

Clogging Class—Meets at noon in Building 300-217. For more information, call Shary DeVore at ext. 4-1024.

Investment Advice—Fidelity will offer one-on-one counseling in T1720-144. For an appointment, call (800) 642-7131.

JPL Gun Club—Meeting at noon in Building 183-328.

Sunday, December 4

Chamber Music—Helen Callus, on viola, and Robert Koenig, on piano, will perform at 3:30 p.m. in Caltech's Dabney Lounge. Free admission. For more information, call (626) 395-4652 or visit www.events.caltech.edu.

Monday, December 5

Tax Deferred Accounts Open House—TIAA/CREF and Fidelity representatives

will be available to answer questions on 2006 accounts from 11 a.m. to 2 p.m. in T1720-137.

Tuesday, December 6

JPL Gamers Club—Meeting at noon in Building 301-227. JPL Genealogy Club—Meeting at noon in Building 301-271.

Wednesday, December 7

Associated Retirees of JPL/Caltech—Meeting at 10 a.m. at La Cañada United Methodist Church, 104 Berkshire Place, La Cañada. Call (626) 794-1698 to leave a message for an ARC board member. TIAA/CREF Enrollment Meeting—This noon workshop in Building 180-101 will assist employees newly eligible for the JPL retirement plan with selection of investment options and completion of their enrollment forms.

Thursday, December 8

JPL Web Developers—Meeting at noon in Building 180-101. For details, e-mail webdev-chairs@jpl.nasa.gov.

Thu.-Fri., December 8-9

Von Kármán Lecture Series—Join Spitzer Space Telescope Project Scientist Dr. Michael Werner for "Exploring the Infrared Universe" at 7 p.m. Thursday in von Kármán Auditorium and Friday in Pasadena City College's Vosloh Forum, 1570 E. Colorado Blvd. Thursday's lecture will be webcast at <http://www.jpl.nasa.gov/events/lectures/dec05.cfm>. For more information, call Public Services, ext. 4-0112.

Tuesday, December 13

JPL Stamp Club—Meeting at noon in Building 183-328.

Wednesday, December 14

Investment Advice—TIAA/CREF will offer one-on-one counseling in T1720-143. For an appointment, call (626) 432-6363 or visit tiaa-cref.org.

JPL Amateur Radio Club—Meeting at noon in Building 238-543.

JPL Toastmasters Club—Meeting at 5 p.m. in conference room 167. Call Dirk Runge, ext. 3-0465, or visit www.jplcaltechtostmasters.com.

Thursday, December 15

JPL Stories—Join Olga Ceritelli and Erik Thiesmeyer for "From JPL to Iraq and Back" at 4 p.m. in the Library, Building 111-104. Come interact with two Operation Iraqi Freedom veterans who will share their experiences while in two distinct locations in Iraq. Photos and other effects related to their experience will be available.

planning for future missions and to be able to compare across appropriate peer groups," said Compensation Manager Elsa Swan. "Project managers and project scientists are expected to operate as peers," added Dr. Andrea Donnellan, deputy manager of the Science Division. In the new Project Scientist Discipline, scientists can now aspire to career levels comparable to those of project managers, including the highest—Project Scientist III — which is an equivalent career level to that of Project Manager III or Division Manager. "The structure we had before didn't allow people this level of project leadership," Langer said. "This provides a career opportunity in project work that is comparable to a career path in line management." Donnellan said the establishment of the discipline enhances JPL's competitiveness by attracting and retaining the best scientists, who can formulate new missions, and by improving the Lab's work with the external community. Individuals in project scientist positions will be evaluated based on the quality of the work performed on the project as well as their scientific contributions, she added. Swan said the initial conversion of project scientists into the new discipline has been completed. If a new project scientist position is created, JPL will follow the standard staffing process of creating a job requisition. When flight missions end, project scientists will be returned to the line organization and be reclassified within the science job family or could be candidates to move to another mission. More information on expectations, the appointment process and reporting relationships is available online at JPL Rules! (<http://rules.jpl.nasa.gov>). A briefing on the Project Scientist job discipline can be found at <http://div32.jpl.nasa.gov/div32newsWhatsNew.shtml>.

TREE LOVERS HELP RESTORE THE OAK GROVE

By Alison Weisbin, Environmental Affairs Program Office,
and Mark Whalen

"THE BEST TIME TO PLANT A TREE IS 20 YEARS AGO, AND THE NEXT BEST TIME IS TODAY."

Using those words as his philosophy, JPLer Roger Klemm led a group of volunteers in the Nov. 5 planting of 25 coast live oak trees and three sycamores in the Lab's northeast quadrant.

Klemm, who works in the Flight Software Applications and Data Product Management Section, has quite a bit of experience in caring for trees. For more than 10 years he's been a member of TreePeople, a local volunteer group that promotes awareness of caring for the urban

forest. His goal was to plant the seedlings soon enough to take advantage of any rain that might fall in November.

About two years ago, Klemm noticed that coast live oak and sycamore seedlings were growing in areas of JPL near buildings and roads, and would eventually have to be pulled. He removed the seedlings in the spring of 2003, potted them, and nurtured them at home, until they became strong enough to replant.

Teaming with Mark Gutheinz, manager of the Facilities, Maintenance and Operations Section; Tony Montgomery, JPL Facilities; members of the Landscaping Group from JPL contractor All-Star; and Sharon Harriman, pollution prevention task manager of the Environmental Affairs Program Office, Klemm spearheaded the effort to transplant the potted trees into designated areas where they could grow unfettered at the Laboratory.

Montgomery said that other than new landscaping for buildings, such a tree-planting effort hasn't taken place at JPL in recent years. "Facilities is excited to be a part of it," he said. "We have every hope that the trees will survive and flourish."

The coast live oak, a native species to this area, is by far the most common tree at JPL's Oak Grove site. Montgomery said the new ones bring the total to just over 400. "These trees have obviously thrived; you can see at many buildings how JPL has built around them. The Lab has done a good job of protecting them."

Deer remain the main threat to the trees' survival. Chicken-wire cages surround the new seedlings for protection.

Each replanted tree was named by the planter, and as Harriman named hers, she wished that the tree would "grow, thrive and be happy." This statement symbolized the spirit of all of the volunteer planters as environmental stewards.

"All went well," Klemm said, indicating that only one deer cage got disturbed, which he fixed the next day. "I'm tickled that it's raining today (Nov. 9). That will get the trees off to a great start!"



Photos courtesy of Roger Klemm



Center: Among JPLers who helped with tree planting (from left): John Riehl, Sharon Laubach, Judith Pons, Andrew Mishkin, Roger Klemm (kneeling), Tam Nguyen, Hsin-Ping (Pat) Chang, Paula Vo, Susan Clancy, Eddie Benowitz. Top (from left): Kathleen Spellman, Benowitz, Sharon Harriman (front, kneeling), Chang, Clancy, Vo (back). Bottom left: Harriman and Klemm. Bottom right: Chang and Vo.

Next Universe
December 16

Due to the Thanksgiving holidays, the next issue of Universe will be distributed Friday, Dec. 16. This will be the annual year in review issue and will be the last one for 2005.

The deadline to submit classified ads for the Dec. 16 issue is Monday, Dec. 5.

JPL'S ONLINE NEWS SOURCE

http://dailyplanet

E-mail us at

universe@jpl.nasa.gov

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Notice to Advertisers

Advertising is available for JPL and Caltech employees, contractors and retirees and their families. No more than two ads of up to 60 words each will be published for each advertiser. Items may be combined within one submission. Ads must be submitted via e-mail to universe@jpl.nasa.gov and are due at 2 p.m. on the Monday after publication for the following issue.

All housing and vehicle advertisements require that the qualifying person(s) placing the ad be listed as an owner on the ownership documents.

Passings

ROBERT ALEXANDER, retired from Section 6425, died Oct. 26.

Alexander worked at JPL from 1965 to 1998. He is survived by daughter Amy and son-in-law Aaron Shinedling, and granddaughters Addison and Alexia.

Services were held at Church of Jesus Christ of Latter Day Saints in Phelan, Calif.

Letters

Thank you so much to my wonderful JPL family for their expressions of love and sympathy on the recent passing of my dear Daddy and Brother. Your prayers, cards and phone calls were so greatly appreciated and helped make my losses easier to bear. Thank you, too, for the beautiful azalea sent by JPL, which I will plant in my yard in their memory.

Barbara Bowman

I wish to thank all the good people who gave me support, and sent cards and gifts after the loss of my husband. It is wonderful to know that so many of David's co-workers liked and appreciated him. Thank you.

Pat Farless

A heartfelt thanks to all of our colleagues at JPL for their kindness, support and sympathy during the recent passing of my mother and Stacy's Nana. The plants given to us by JPL meant so much. Sincerely, Nancy Greenberg and Stacy Klinger

My family and I would like to express our sincerest thanks to all our friends, co-workers, and JPL for the condolences, cards and plants that were sent after the recent passing of my grandmother, who played a very important role in my life. Your kindness and thoughtful consideration really meant a lot during this difficult time.

Don Potter and family

Retirees

The following JPL employees retired in November:

Kenneth Evans, 42 years, Section 5145; Robert Berwin, 40 years, Section 3872; John Borthwick, 40 years, Section 372; Lawrence Hawley, 30 years, Section 3135; Virginia Dominguez, 27 years, Section 2672; Audrey Ridley, 23 years, Section 2241; George Yankura, 21 years, Section 353; Evan Davies Jr., 17 years, Section 3463; Arthur Duran, 15 years, Section 264; Bernd Richter, 10 years, Section 375.

Also retiring in October:

Frank Estabrook, 45 years, Section 3266.

Classifieds

For Sale

BABY ITEM, Medela Pump-In-Style, exc. cond., was \$339, now \$165. 909/598-0065. BASEBALL NET / pitching target, excellent condition, \$35. 626/646-1937. BASSINET, Pottery Barn Kids, used for 6 months, vg condition, with green bumper/skirt/sheets/mattress, \$150. 951-3532, Andrea. BED, queen, Simmons BeautiRest, Preeminent Jewel Luxury mattress with box spring and frame, used as guest bed, great condition, \$180. 626/355-5060. CHINA CABINET, 1950s Drexel mahogany, \$400 cash and carry. 353-9367. COFFEE TABLE, Ikea, contemporary and large, wood frame with glass top and wheels, vg condition, original price was \$250, sell for \$100, e-mail for picture. johnnytung@gmail.com. CONCERT TICKETS (2), California Philharmonic, Friday, Nov. 25, 8 p.m. at Ambassador Auditorium, Pasadena; see http://www.calphil.org; great seats, 5th row;

20% off. \$144 for the pair. 626/688-1648. CONCERT TICKETS (2) for Paul McCartney, Staples Center, Nov. 29, 8 p.m., \$200. 714/271-8962, Nick. DANCE TICKETS (2) for Alvin Ailey American Dance, Dorothy Chandler Pavilion, Feb. 22, 7:30, seats in founders circle, \$100 for pair. 790-8523. DAY BED, twin size, white/gold, almost new, in perfect shape, \$60. 957-8614, Mina, after 5. DIGITAL CAMERA, Samsung 4 MP Digicam, 1.8 LCD, brilliant pics, easy to use, nice features, bought new 1 month ago & used only few times, \$120. 562/644-7799, nmkj@hotmail.com. DIGITAL CAMERA, HP 407 4 MP, 1.8 LCD, clear pics, easy to use, nice features, bought new & used only few times, \$140. 562/644-7799 nmkj@hotmail.com. DUVET/BEDDING SET, queen, luxury, less than a year old; Eastern Accents' "Monroe" pattern, check it out on their website; big savings at \$850 for the set. 626/864-6495, Sue. DVD DRIVE, super multi + burner, brand new, was birthday gift, model LG-GSA-4163B, too fancy for our computer, cost \$75, sell for best offer over \$50. 626/792-2655. EXERCISE EQUIPMENT, Concept II rowing machine, 1990 vintage, good condition, \$300. 626/296-3148, evenings. HDTV BIG SCREEN, 43" Toshiba 4:3 tabletop TV, multiple inputs for surround sound and components, remote and manual included, in great condition, will include a \$200 stand for free, only 4 years old, original price \$1,500, must sell, great price, \$500. 619/861-3158. HOMEBREWING KIT, complete package, including 5-gal. glass carboy, \$40/obo. 626/794-1319. MATTRESS SET, twin, with frame, \$50/obo. 661/299-2490, Yvonne. MINING EQUIPMENT, miscellaneous, used: includes a 3,000-lb. jaw crusher, steel ladders, Ingersoll-Rand air compressor, high-pressure hoses, jackhammers, jackhammer rods with bits, winches, steel cables and heavy-duty bearings; was used by deceased father who was a serious mining hobbyist; also various sizes and shapes of angle iron and I-beams, and assorted lumber and timbers. 626/355-4475, JLesht@keyway.net. MISC: apt.-sized frost-free refrigerator, energy-efficient, freezer on top, \$125; solid oak 21" lazy susan turntable, \$25; automatic bread machine, w/books, \$40; mid-sized car cover, barely used, \$25; sleeping bag, \$10; oak-framed picture of Space Shuttle Columbia take-off, w/astronauts picture, patch, & pin on back, \$150. 249-4561. MISC: fishing pole (saltwater), \$25; baseball glove (\$10, left handed) & conditioner, good cond., \$10; landscape oil painting, autumn tones, \$75; home gym, \$75. 626/357-8210. NATIVITY SET, traditional, life size, outdoor, lighted, includes cords with plugs (14 pieces), 909/593-5838, after 5 p.m. OVEN, GE Advantium 120 with "speedcook" technology adds halogen heat lamps to a conventional microwave/convection oven; white "Profile" model fits above conventional cooktops in same space as popular spacemaker models (16 13/32" x 15 3/8" x 29 7/8"); uses standard 120 volt connection; used less than 1 year before being replaced with newer model during remodel; remainder of 5-year warranty is transferable; \$350. 805/493-1781. PIANO, upright Baldwin Monarch, good condition but string damaged during last move and needs some work, deep sound, bench included, \$300. 957-0743, Karen. PIANO, Kawai KG-3, 6' 1" grand, SN 530145 (made in Japan circa 1971), polished ebony, includes piano bench and cover, excellent condition, located in Altadena; \$11,500 obo. http://home.earthlink.net/~briazen/piano. 626/398-6564. PICTURE, Paradise Waterfall, 46" x 29", moving water & bird sounds (volume control), creates the illusion of moving water, \$120. 653-9037. PINBALL GAME, children's version by Monopoly, removable legs for table-top or free-standing use, 16" wide x 29" long, \$35. 626/303-1927, Steve. PRINTER, HP Deskjet model 720C, photo quality, parallel I/F, \$40; SCANNER, Epson model 1200U, 1200 x 2400 dpi, usb I/F, \$60. 626/641-2274. PRINTER, Canon 180 Bubblejet, \$100. 661/297-5234. SANDER, Porter-Cable random-orbit (5"), model 333K, includes case, brand new, never opened, \$50 (sells for \$65 on Amazon), 353-4400, Brian. SOFA with 2 end recliners and matching recliner chair that swivels, very comfortable and in excellent condition, pictures can be sent by e-mail, \$300/both. 661/254-7443. TROPICAL PLANTS, plumerias, variety of colors and sizes; shell gingers. 626/444-6156. WALL UNIT, Thomasville, oak sectional unit measures 80" tall by 109" wide; end units have beveled glass doors, mirrored backs and glass shelves; large central TV compartment with doors can accommodate 27" TVs with 30" max height, 25" max width; vg cond.; \$500. 805/493-1781. YARD SALE, multi-family, Saturday, Nov. 19, 8 a.m. to 4 p.m., corner of Grand Oaks & Oakdale Ave. (near Sierra Madre & Del Mar), Pasadena. 626/683.9131.

Vehicles / Accessories

'02 BMW 325i, 4-dr. sedan, 2.5 inline-6, 5-sp. manual, power locks/mirrors/windows, CD, iPod adapter, keyless entry & alarm, white on sand leatherette, exc. condition, only 22K miles, free maintenance until 48K miles, \$21K. 626/449-0997. CAR NAVIGATION SYSTEM, Garmin Street Pilot 2620, portable, with external antenna, \$400/obo. 790-0697. '74 CHEVY C20 pickup, V8/350, long bed, excellent work truck or 1st vehicle, new brakes, bench, slider window, CD/stereo, body in good cond., well maintained, runs great, \$2,750/obo. 626/285-5683, eves. '01 DODGE Intrepid SE, excellent cond., only 25,000 mi, 4 dr., silver exterior, charcoal fab-

ric interior, automatic, a/c, \$8,500/obo. 626/644-0251, Alex. '02 FORD Escape XLS, 5-speed manual, a/c, roof rack, 50K mi., white, new tires/brakes, vg condition, 100% dealer servicing, fun to drive, \$9,750 (below pp blue book value). 731-4983, Tim, days. '01 FORD Mustang convertible, black w/gray leather interior, loaded, pwr. everything, 60K miles, well taken care of, \$11,500/obo. 818/521-4411 or 626/357-0534, Emily. '95 FORD F-150, ext. cab, red, Eddie Bauer edition, automatic, 131K miles, power steering/windows/mirrors, a/c, bed liner, tow package, good cond., \$5,200/obo. 760/252-6999. '93 FORD Explorer XLT, 4 x 4, V6, blue, 96K miles, alloy wheels, Bilstein shocks, ABS, new brakes, leather, JVC stereo/CD, well-maintained, good cond., \$3,500/obo. 626/794-1319. '49 FORD F3 pickup, includes winch, has recently run, currently licensed but with a non-op tag, body in good condition, photos avail., \$3,000; 2 Corvair engines and miscellaneous older auto engine parts (including flathead motors), JLesht@keyway.net, 626/355-4475. '96 HARLEY Custom Rigid, rigid frame by Atlas, 80CI S&S, 3" drivebelt, 5-spd. trans, 180 rear tire, 21" front wheel, custom forward controls, a great bike, lots of attention, is registered and I have pink, \$13,000/obo. 626/497-9591, Gene or guidos76@yahoo.com. '95 LAND ROVER Range Rover SE V8 4.0 L, auto, 4WD, 138K, tan, leather seats, CD, ps, pw, dual airbags, moonroof, runs great, good condition, \$6,100/obo. 626/296-9073 or 818/515-2461. '03 LAYTON SCOUT 32 travel trailer, like new, sleeps 6, 12-ft. super slide-out, full kitchen with micro, stove, oven, etc., full tub/shower, lots of storage inside and out, hydraulic lift hitch, includes stabilizing bars for towing, \$15,500. 909/518-9961 or jewlins@aol.com. '02 LEXUS IS 300, loaded, auto, 6-CD changer, GPS navigation system, everything power, moonroof, leather power seats, spoiler, 36K miles, good cond., \$21,500. 909/599-3230. '87 MERCEDES 560SL convertible roadster, 5.6L V8, 4-spd. auto., a/c, pw, pdl, ps, 159K, classic 107 body style; must-do mechanicals done: top-end rebuilt, replaced timing gear and chains, starter motor, water pump, motor and body mounts, shocks; new tires, leather, canvas top, remote alarm and locks, cd/mp3/ am/fm stereo; \$9,600/obo. evn82@sbcglobal.net. MOTORCYCLE HELMET, Shoei full face, XL, orange, like new, orig \$340, sell for \$75. 626/794-2431. '03 NISSAN Pathfinder LE, 37,800 mi., exc. condition, black exterior, tan leather interior, Bose 6-disc changer, sunroof, bicycle rack, auto climate control, keyless entry, power locks/ mirrors, rear defrost, remote trunk release, tinted glass, \$17,995. 458-5557, Milana. '01 NISSAN Frontier, 2-dr. King Cab, sliding rear window, 30K mi., auto trans., pwr. steering, dual airbags, AM/FM/CD audio, bed liner, exc. cond., \$10,200/obo. 661/260-3327, Bob, yanhuaob@sbcglobal.net. '94 NISSAN Sentra LE, 4 door, 78K miles, 5-speed man. trans., charcoal gray color, great gas mileage, perfect car for college student, \$2,490. 626/345-9133, Mike. '98 PONTIAC Sunfire SE, 85K miles, 4-gear automatic transmission, excellent condition (all new cooling system, tires), a/c, CD audio system, \$4,200. 373-0723. '98 TOYOTA Camry LE, 85K miles, sage, good condition, VIN JT2BG22K6W0113144, \$6,000. 626/797-6388. '97 TOYOTA Camry, 120K miles, runs great, looks good, no accidents, new tires and struts, blue with gray interior, \$4,500/obo. 248-9708. '93 TOYOTA Camry SE, 4-door, dark blue, auto, a/c, 161K mi., clean, excellent running cond., no accidents, some scratches on exterior, \$3,300. http://home.earthlink.net/~briazen/93camry. 626/523-6983, Brenda.

Wanted

FLUTE PLAYER, intermediate level, to practice w/guitar for occasional performance for seniors or church functions; also support vocalists of small informal music group; volunteers only. mlei@ligo.caltech.edu; 626/840-0955, cell. MONITORS to join recycled computers for students (need 7). 957-4218. MOTORCYCLE, 250-750 cc, in good condition. 626/345-0528, Sasha. ROOMMATE to share townhouse in Arcadia (easy access to mall, 210 freeway); quiet; large bedrm w/priv, bathrm, space in attached 2-car garage; unit has washer/dryer, large kitchen, two patios, nice living area (cable rdh); central air & heat; water and trash included; non-smoker, clean, no pets, month-to-month; \$750 + 1/2 util. 626/399-7697, Matt. ROOMMATE to share large Altadena back house (2,200 sq. ft.); your own bedroom, bathroom, office space (Internet ready-cable), and garage parking; share laundry room, kitchen, lots of space, central air/heat; non-smoker, no pets, month to month lease, \$1,100 + 1/2 utilities; applicant must be approved by house owners. http://home.earthlink.net/~briazen/ roommate, 626/523-6983 Brenda. SPACE INFORMATION/memorabilia from U.S. & other countries, past & present, for personal use. mrayman@alumni.princeton.edu. 790-8523, Marc Rayman. VANPOOL RIDERS, would you like to not drive every day from Victor Valley/Hesperia to JPL? save the miles on your car, we meet in Hesperia. Ext. 4-1424, Scott. VANPOOL RIDERS, seats available in new 2005 Ford luxury 14-passenger vans; full-and part-time on Fontana vanpool with stops in Rancho Cucamonga and La Verne; save gas, be energy-efficient; JPL employees who are full-time riders can qualify for a \$50/mo. subsidy. Ext. 4-5831, Rhea Clearwater or 4-8343, Mike Taylor, for vanpool times, route and monthly fares or the Rideshare Office, 4-7433.

Free

CATS (2), loving brother & sister, 7 yrs. old, black & white, happy/healthy/fluffy, raised with dogs, spayed/neutered, owner too ill to keep them. 429-8041, 249-5072. RABBITS, babies, currently in foster situation; live in-house, need homes with loving families; well socialized, healthy, active, inquisitive, friendly; adopters must agree to spay or neuter; call for photos, adoption form. 626/864-8047, Laura.

For Rent

ALTADENA room, all necessities furnished; laundry, sheets, towels, dishes, TV, VCR; parking and small patio enclosed; close to JPL in a very nice area, next to Christmas Tree Lane; very quiet and clean; \$600. 626/798-4821. ALTADENA, rm. in large, beautiful house 2.5 mi from JPL, non smoker, clean, must love dogs, \$550 + 1/2 utilities furnished, \$500 + 1/2 utilities unfurn. 626/712-3451. ALTADENA foothills, cute 3 bd., 2 ba. house, close to hiking/biking trails, perfect for nature lovers, nice views of the mountains from spacious backyard, bedrooms are decent size with nice closets, looking for a professional or student who is respectful and responsible, animal lovers only. 626/798-4907. ALTADENA, large studio 1 block from JPL, full ba., kitchen, laundry facility, all utilities paid, 840 Ventura St., \$1,150. 626/818-0212. ARCADIA apt., 2 bd. + den, 1 ba., garage, upstairs unit, clean, spacious, washer/dryer in unit, a/c, stove, walking distance to shops/restaurants, near SA Fashion Park, quiet residential neighborhood, close to JPL and 210/10 fwy., no pets, water/gardener/trash included, \$1,450. 626/576-7333. BURBANK townhome, 3 bd., 2 ba., clean, spacious; washer/dryer in unit, a/c, patio, fireplace; pool, tennis, good school district, near downtown; \$2,850. 909/225-2323. MONROVIA/ARCADIA, front house, 2 bd., 1 ba., stove/refrig/hardwood floors, washer/dryer hookups, water & gardner paid, avail. 12/1. 909/596-9202, after 4:00. N.E. PASADENA, 3 bd., 2 1/2 ba., den or office, laundry rm., fireplace, hrdwd. flrs., 2-car gar. 626/794-3906. PASADENA home for lease, 2 bd., 2 ba., large kitchen, lots of storage, laundry hookup, stove, refrig, gardener, enclosed back yard, huge 2-car garage near Caltech and vicinity, no pets, no smokers, \$1,500, call for open house date. 626/794-0455. PASADENA, rm. in a 2 bd., 2.5 ba. townhouse, 2-car garage, tree-lined, lots of storage space; quiet, 6 miles from JPL, across from PCC; own bath w/priv. entrance and can be partially furn.; washer/dryer, patio, a/c, fireplace, cable modem, WiFi, DirecTV, HiDef Tivo, phone in unit; no pets or smokers; \$850 + 1-mo. deposit, includes all util. except long-dist. phone; exc. credit report req.; mo.-to-mo. lease approved by external landlord. 626/844-9286, Dave. PASADENA townhome, 2 bd., 2.5 ba. + bonus room; oven, microwave, dishwasher, washer/dryer in unit, a/c, garage, sky lights; \$1,950. 909/225-2323. PASADENA, easy going, non-smoking housemate wanted, small bedroom in a 4-bd. house, walking distance to JPL (2 blocks); central air/heat, fireplace, patio and backyard; laundry/kitchen privileges, wireless network, satellite/tv, no pets, off-street parking; \$650 + \$400 deposit, utilities included. 626/807-0699. SIERRA MADRE apt., 160 Highland, 1 bd./1 ba., garage & storage/on-site laundry; new stove/oven/floors/paint; no pets, no smoking; \$800 + \$800 security deposit. 213/494-6890, Lucie.

Vacation Rentals

BIG BEAR LAKE, cozy cabin, blocks from Snow Summit, sleeps 6, very private, plenty of parking, cable TV, DVD, shuffleboard; pics: http://pg.photos.yahoo.com/ph/tylnch41/album?.dir=/3ec5. 726-1270, Tom Lynch. BIG BEAR LAKEFRONT, luxury townhome, 2 decks, tennis, pool/spa, beautiful master bd. suite, sleeps 6. 949/786-6548. COSTA RICA condo, Quepos area, 2 bd., 2 ba., a/c, kitchen, fully furnished, pools, tennis court, tv cable, relaxing setting, 15 min. to Manuel Antonio park, nr. monkey tour, JPL rates, luisalfaro@earthlink.net. 760/723-8522. FLORIDA condo, beautifully furn. 2 bd., 2 ba., 2nd floor, on the surf of New Smyrna Beach, 1/2 hr. to Cape Canaveral, 90 min. to Disney World; enjoy all the comforts of home, quiet, relaxing, overlooks beach, BBQ/pool/game room, easy walk to stores and restaurants. 760/439-7821, Darlene, dhauge@yahoo.com. GRAND TETON / YELLOWSTONE Nat'l Parks, visit in style, 2 bd. + loft townhome, totally outfitted, stunning Teton view, sleeps 6, cable, microwave, etc., borders Grand Teton, conniematt@sbcbglobal.net. HAWAII, Maui condo, NW coast, ocean front view, 25 ft. fr. surf, 1 bd. w/loft, compl. furn. phone, color TV, VCR, microwave, d/w, pool, priv. lanai, slps. 4, laundry fac., rate \$145/ nite/2, \$20/nite/add'l person. 949/348-8047, jacksondrandy@cox.net. MAMMOTH, Snowcreek, 2 bd., 2 ba., + loft, slps. 6-8, fully equip'd kitchen incl. microv., D/W, cable TV, VCR, phone, balcony w/mtn. vw., Jaccz., sauna, streams, fishponds, close to Mammoth Creek, JPL disc'nt. 626/798-9222, 626/794-0455 or valerieec@caltech.edu. OCEANSIDE condo, on the sand, charming 1 bd., panoramic view, walk to the or harbor, pool, spa, game rm., sleeps 4. 949/786-6548. PALM SPRINGS / LA QUINTA, beautiful 1 bd./ 1 ba. upstairs country club condo right on the golf course; slps. 4, incl. cable TV, free unlimited golf, 1-car garage, multiple swim pools; 10% discount + free turkey for all or recent JPL staff; avail. 11/18-12/9 for \$800/wk. or \$2,000 for all 3 wks. 323/620-6682, Jonathan Kabfeld or jonathan.kabfeld@gmail.com. ROSARITO BEACH condo, 2 bd., 2 ba., ocean view, pool, tennis, short walk to beach on priv. rd., 18-hole golf course 6 mi. away, priv. secure parking. 626/794-3906.