



North Central Florida's
Amateur Astronomy Club
29°39' North, 82°21' West

January / February 2010

Issue 89.1/90.1



Member
Astronomical
League



Member
International
Dark-Sky Association

FirstLight
Newsletter of the Alachua Astronomy Club



Tandy Carter Receives 2009 AAC Star Award

Tandy Carter received the 2009 AAC Star Award from incoming President Rich Russin. Tandy Carter has been a member of the Alachua Astronomy Club for many years serving in several officer and Chair positions including Secretary, School Liaison, Outreach Coordinator and Telescope Custodian.

The Star Award is an honor bestowed upon an AAC club member each year for their outstanding contributions and hard work. Thank you Tandy for all you've done for the Alachua Astronomy Club!

For more photos of the Holiday Party see pages 8 and 9. Photos by Chuck Broward.



By the time you read this column, the holidays will be over but the memories are still fresh. I hope all of you celebrated in high fashion and shared good times with friends and family. And I hope all of you had a chance to do something special related to astronomy.

As we welcome 2010, it's worth taking a moment to reflect on what this means to the club. Like the changing of the seasons, your board and officers have also changed. We offer our collective thanks to the outgoing officers and welcome in the new. Leaving office are Bill Helms (President), Tandy Carter (Secretary), and Howard Cohen (Board Member). We owe them a hearty round of applause for their service. All had been in their positions for several years. They have each contributed a vast amount of time and work, all volunteer, on behalf of the club. I plan to run a profile on each of these individuals in future editions of Firstlight to recognize their contributions.

I think you will find the incoming Board and Officers equally dedicated to the task of running the club. Staying on as Board Members are Pamela Mydock and Fred Palgon. Howard Eskildsen replaces Howard Cohen as a board member. The Treasurer remains Larry Friedberg, who has managed the club's finances in stellar fashion for many years. At the Secretary position, Bob Lightner replaces Tandy Carter. Bob Duvall will take over the office of Vice President.

I have the unenviable task of replacing Bill Helms as club President. Perhaps a better way to view it is that I am taking over as the new President. Bill leaves a legacy that will be hard to follow.

While we are on the subject of the club's leadership, there is no time like the present to start recruiting for future openings. Last year, Sandon Flowers was an understudy for Howard Cohen as "Webmaster in Training". Sandon has done an excellent job and is prepping for the head Webmaster position. That implies exactly what you might think, that not far down the road, there will be a need of someone to be an assistant to Sandon.

Along the same line, we need to find someone to assist Jackie Owens with Firstlight. She continues to shoulder the task single-handedly. By all measures, it remains one of the most popular benefits of being a club member. Producing this publication takes a lot of hard work. It would be great if we could recruit someone to help her.

Finally, good accounting practices dictate a periodic change in Treasurer and that time is coming soon. If there is someone in the club with the proper skillset for this position, please contact me.

The dawn of 2010 also means the close of IYA2009. Their banner headline- ***The Universe - Yours to Discover***, was inspiring and well stated. The planners made it truly an international phenomenon. The last count showed 148 nations participating in the event. At the local level, our club participated in a number of Cornerstone Projects including '100 Hours of Astronomy', the Galileoscope, and 'Galilean Nights'. A lot of hard work was done by members of the club and I want to recognize them in a separate column.

Officially, IYA2009 closes in a four day event from January 7 thru 10, 2010. The official closing ceremony will be held in Padua, Italy on the final two days. It is shaping up as a major media event. Following the closing bell, the organizers will conduct a follow-up and review of the event to determine if the objectives were met and to what degree the public participated. In addition, they want to know "Has public appreciation of science changed as result of the IYA2009". It will be interesting to see what they learn. For those of you looking to learn more, I encourage you to visit their website at www.astronomy2009.org.

Looking ahead, I would like your assistance for my next column. The term 'first light' is used in many ways in astronomy. At the amateur level, it is often associated with an owner's first look through a new scope. In my next column I would like to extend that back even more to include our first look ever through a telescope. I have a special story to share with you about my first 'first light' experience. I would also like to hear your story. I welcome anyone who would like to share their story to send me a private email and let me know if I could share it with the club. I thank you in advance as we look forward to a great year ahead.

Rich Russin,
President, Alachua Astronomy Club
president@floridastars.org

Alachua Astronomy Club, Inc.
2010 Officers

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Pamela Mydock
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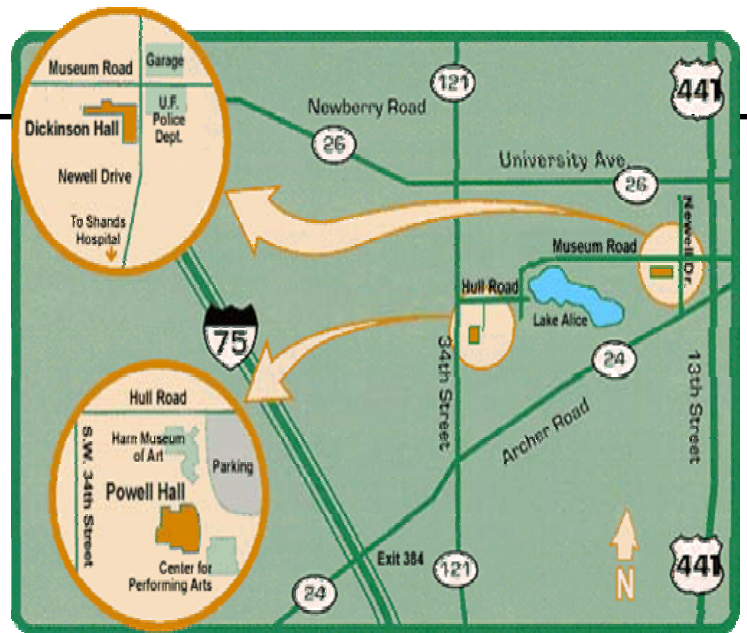
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FirstLight Editor: Jackie Owens
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AAC Meeting Location - AAC regular meetings are held on the second Tuesday of each month at 7:00 p.m. at the Florida Museum of Natural History, **Powell Hall**, in the Lucille T. Maloney Classroom, on UF campus, unless otherwise announced. All meetings are free and open to the public. Join us for some great discussions and stargazing afterwards. Please visit our website for more information (floridastars.org). There is no monthly meeting in December.



Submitting Articles to FirstLight

The AAC encourages readers to submit articles and letters for inclusion in *FirstLight*. The AAC reserves the right review and edit all articles and letters before publication. Send all materials directly to the *FirstLight* Editor.

Materials must reach the *FirstLight* Editor at least 30 days prior to the publication date.

Submission of articles are accepted **by e-mail or on a CD**. Submit as either a plain text or Microsoft Word file. (In addition, you can also send a copy as a pdf file but you also need to send your text or Word file too.) Send pictures, figures or diagrams as separate gif or jpg file.

Mailing Address for Hard Copies or CDs

Note: Since our mailbox is *not* checked daily, mail materials well before the deadline date. (Hence, submission by e-mail is much preferred!)

c/o FirstLight Editor
The Alachua Astronomy Club, Inc.
P.O. Box 141591
Gainesville, FL 32614-1591 USA

By E-Mail; Send e-mail with your attached files to
FirstLight@floridastars.org.

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Alachua Astronomy Club, Inc.
A Not For Profit Organization



2010 Membership Form

Date ____/____/____ (Please CHECK one) **New Membership?** ____ or **Renewal?** ____

Name (Primary Applicant) _____

Address _____

City _____ **State** _____ **Zip** _____ **Country** _____

Telephone(s) Home (____) _____ **Business** (____) _____ **Cell** (____) _____

E-mail _____ **NOTE: Please fill in all information since we are updating our records.**

Astronomy Level (CHECK one) **Beginner** **Intermediate** **Advanced**

Own Telescope(s)? (CHECK one) **No** **Yes** **Type(s)** _____

How Long Interested in Astronomy? _____

If new member, how did you learn about us? **Web** **Newspaper** **Word of Mouth** **Other (specify)** _____

Special Interests/Abilities _____

Any Club Duties Would Like to Volunteer For? _____

Dues Categories: AAC membership allows voting rights and election to club offices for the primary applicant and each included Associate membership.

CHECK ONE dues category under either **A. Individual** or **B. Dual/Family** (includes one Associate membership). CHECK **Additional Associates** under **C. Other** if you want other family members to have voting rights.

A. Individual¹

- Member \$28.00
- Senior³ \$20.00
- Full-time Student⁴ \$12.00
- Supporter⁵ \$60.00
- Benefactor⁵ \$100.00

B. Dual/Family^{1,2}

- Member \$40.00
- Senior³ \$32.00
- Supporter⁵ \$72.00
- Benefactor⁵ \$112.00

C. Other

- Additional Associates \$12.00 each

New member proration: Remit 50% dues between July 1 – Sept. 30. Remit full dues after Oct. 1 (will be applied toward following year).

¹ Membership includes Astronomical League membership (including one subscription to *Reflector Magazine*) and one subscription to *FirstLight* newsletter. The AAC is a member of the International Dark-Sky Association; please consider individual enrollment.

² Includes one Associate membership with voting privileges.

³ Eligible seniors are 62 years or older. (Seniors can still select regular membership!)

⁴ Student membership includes electronic subscription to *FirstLight* newsletter only.

⁵ The AAC is exempt from federal income tax (IRS Code, Sect. 501). Contributions to the AAC may be tax deductible. See your tax advisor.

Membership in the AAC (CHECK ONE category from Column A **or** Column B (above) \$ _____

Additional Associate Memberships at \$12.00 each (CHECK Col. C) **No. of Assoc. Memberships:** ____ x \$12.00 = \$ _____

Names of ALL Associate Members _____

NOTE: AAC Mailing Address Has Changed from Previous Years

Make check out for total amount of dues to the:

Send *completed form* and *check* for club dues to:

(We cannot accept dues without completed dues form)

Alachua Astronomy Club, Inc.

Treasurer
Alachua Astronomy Club, Inc.
P.O. Box 141591
Gainesville FL 32614-1591 USA

Total Amount Due \$ _____

Check Number _____

January Club Meeting

Tuesday, January 12, 2010, 7:00 p.m. ET

Speaker: Tim Malles

Title: *An Artist In Residence—Celebrating the 50th Anniversary of Kitt Peak National Observatory*

Location: Powell Hall, Florida Museum of Natural History
(Lucille T. Maloney Classroom), UF Campus, Gainesville FL



Astronomical Artist
Tim Malles

Preview: Local artist and AAC member Tim Malles will give a brief multimedia presentation sharing his experiences as an "artist in residence", celebrating the 50th anniversary of Kitt Peak National Observatory. In all, eight artists of the IAAA, the International Association of Astronomical Artists, gathered for a week's residency where they were given exclusive behind the scenes access to the great telescopes and observing programs of the world's largest observatory, to inspire their creative efforts. This program will include a brief history and overview of Kitt Peak, and a look at some of the important research work being done there today. Tim will have a special display of his Space Art, including paintings created at Kitt Peak.

About the Speaker: Tim Malles is a professional artist living in Gainesville, FL. Much of his artwork is inspired by astronomy themes, and he was accepted as a Juried Artist Member of the International Association of Astronomical Artists in May 2009. He has been an active member of the AAC since 2001, serving as Star Party Chair, Board Member, Programs / Publicity Chair and volunteering in various AAC activities and public outreach events. As a volunteer of the AAC, he contributed efforts to the construction, design and installation of the Gainesville Solar Walk, including the design and installation of the bronze information plaques.

AAC'S E-MAIL ANNOUNCEMENT LIST

Have you joined the AAC's mailing list, AAC-L? Don't miss important AAC announcements and reminders. This is a public, moderated list. Anyone may subscribe but all messages are filtered by list moderators to prevent unwanted messages and spam. Members may also post announcements to this list but be warned AAC-L is not a discussion list.

To Subscribe:

1. Send e-mail to listserv@lists.ufl.edu
2. Use no subject or signature
3. In body of e-mail put SUBSCRIBE AAC-L firstname lastname
4. Spell list's name carefully: AAC-L
(Note dash between AAC and L; the last character is the letter L not the numeral one)
5. Send your request to listserv (listserv@lists.ufl.edu) and NOT TO AAC-L!
6. Notice that listserv is spelled without a final letter "e"
(it is listserv NOT listserve)

NOTE: You should then shortly receive a confirmation message that you must confirm to activate your subscription.

For more information, see <http://www.floridastars.org/listserv/aac.html>

If you wish to join an AAC discussion group, subscribe to ATM-Observers-L. More info is at <http://www.floridastars.org/listserv/atml.html>

The Outhouse: When Nature Calls

— Howard L. Cohen

out-house *n.* **1.** A small, enclosed structure having one or two holes in a seat built over a pit and serving as an outdoor toilet. **2.** An outbuilding, as on a farm.

~*American Heritage Dictionary*

Outhouse you say? What does this have to do with astronomy? Nothing and everything. First, definition number 2 (above) refers to an “outbuilding” or any small structure placed away from a main building and often used for activities not wanted in the primary house. Therefore, backyard astronomical observatories fall into this category (Fig. 1). Yes, your favorite telescopes may very well be stored and used in an “outhouse.”

However, outhouses can also be an outdoor “toilet” or “privy” as they are sometimes known (Fig. 2). Many other terms are also used. In fact, other countries besides the USA have their own terminology as the “dunny” in Australia or the “long drop” in New Zealand!

But then again, how do outdoor toilets relate to astronomy? Aside from their possible convenience when observing in a rural area, have you not seen many outhouses with crescent

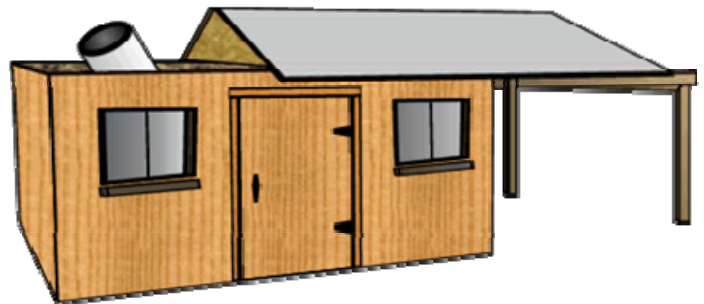


Figure 1. Did you know a backyard observatory is an “outhouse”?

moons carved on their sides or doors? And have you not wondered why?

Digression. Many articles discussing outhouses erroneously refer to these lunar cutouts as “half-moons.” However, a half-moon is a popular word for the astronomically correct *quarter moon*, a moon appearing half illuminated and not a crescent.

But back to crescent moon symbols carved into the sides of outhouses. First, it is a popular myth that outhouses have or must have these lunar signatures. Many, if not most, do not. They may, however, have other symbols decorating their walls. For example, the Swedish road sign for an outhouse uses a heart (Fig. 3). Possibly the association of outhouses and crescent moon was made popular by cartoonists, for reasons only known by their sometimes “perverted” sense of humor.

Still, other stories abound. Some say carving these symbols helped illiterate peoples distinguish between the men and ladies facilities. This may be an urban legend. But why use a crescent moon?



Figure 2. An outdoor toilet is also an example of an “outhouse.” Did you know some but not all have a crescent moon cutout?

Historically, at least in Europe, the Moon was associated with the goddess of the hunt, wild animals and also the Moon (Fig. 4). Examples include (Artemis in Greek mythology and Diana in Roman mythology. Associating the Moon with hunting is not surprising since bright moonlight aides the hunter. In fact, the first full moon after the Harvest Moon is often called the



Figure 3. Swedish road sign for an "outhouse."

"Hunter's Moon," which fell on 2 November 2009 and will occur 22 October this year (2010).

However, solar deities, although sometime associated with goddesses (as Amaterasu in Japanese beliefs), have frequently been related to male gods. This common belief may be due to popular Greek and Roman mythologies that use male deities.

Stories abound about why the crescent carving survives on outhouses but not a Sun symbol. One variant tells it this way. Women took better care of their "facilities" than the men. Men, ultimately sought them out leaving the male counterparts unneeded so they disappeared from history. Another variant claims ladies' outhouses outlasted men's because porcupines chewed their seats due to their liking for salt found in urine!

Others will simply state, which would you rather carve or draw (cartoonists take note) a crescent moon or a radiating sun symbol on the side of an outhouse?

But why a crescent rather than, say a quarter or full moon? Ah, you may want a view out but you probably don't want much of a view in!

Regardless, holes were certainly placed in the sides of outhouses both for ventilation and light (at least during the day). People have also used many shapes over the years including diamonds, triangles, hearts, V-shapes cutouts and even circles (full moons?) for those wanting a view.

Whether or not one adopts the outhouse as an observatory outbuilding or an outdoor toilet, both meanings definitely carry the connotation, "nature calls."

Naturally, crescent moons should continue to adorn the "astronomer's outhouse," especially for lunar observers. However, I would think a star design, which, in fact, has sometimes been used, might better fit the deep sky observer.

You decide.



Figure 4. The Moon has traditionally been associated with female goddesses.

□

Howard L. Cohen is an emeritus professor in the University of Florida's Department of Astronomy and a founding member of the Alachua Astronomy Club, Inc.

AAC Holiday Party—Lots of Fun and Great Food!

A Special Thanks to Mark and Cindy Barnett for hosting this year's Holiday Party and Celebration of AAC's 22nd Birthday!
Photos by Chuck Broward





FIRSTLIGHT AVAILABLE ON-LINE

AAC's bimonthly newsletter, "FirstLight," is available online as pdf files (archived since Dec 2006/Jan 2007).
<http://www.floridastars.org/firstltonline.html>

2010 Issues, however, can only be accessed if memberships for 2010 have been paid. Online issues are a privilege of AAC membership.

Our treasurer, Larry Friedberg, will e-mail 2010 paid members User ID's and Passwords to access 2010 FirstLight issues online. If you have paid your 2010 dues and do not receive his mailing within 30 days of renewal, contact Larry at treasurer@floridastars.org.)

Having "FirstLight" available online has several advantages including:

- You need not save or archive hard copies of past issues.
- Past issues are always available wherever you have computer access.
- Pictures are in "breathtaking" color!"
- We also hope to have online versions available sooner than mailed copies.

EACH CURRENT ISSUE IS AVAILABLE AS A LINK FROM THE AAC HOME PAGE:

<http://floridastars.org/firstltonline.html>

Alternately, the home page can take you to the "FirstLight" on-line web page where you can access past issues.

RENEW YOUR AAC MEMBERSHIP FOR 2010!



This issue of FirstLight contains a membership form on page 4. Please complete and return that form or go online for a form at
<http://www.floridastars.org/join.html>

AAC members who have not renewed for 2010 will be dropped from our membership roles after April and will no longer receive mailed copies of "FirstLight."

SAVE THE AAC MONEY

You can save the AAC money in the future by electing to receive "FirstLight" only through our web site as a pdf file rather than receiving a mailed copy. To elect this option, please send an e-mail to our treasurer giving your name with the request that you no longer wish to receive a hard copy of "FirstLight":
treasurer@floridastars.org.

Past members who have already elected the online option do not need to notify our treasurer.

Remember the AAC is a public, not for profit organization, dedicated to public service, and operated entirely by volunteers. The AAC needs your membership dues to continue its successful operation.

MONTHLY MINUTES OF THE EXECUTIVE COUNCIL MEETINGS AVAILABLE ON-LINE

Monthly minutes of the AAC Executive Council (Board) meetings are available online. Monthly minutes will usually be available after the Board meets a month later and approves the previous minutes.

Howard L. Cohen
AAC Webmaster

February Club Meeting

Tuesday, February 9, 2010, 7:00 p.m. ET

Speaker: Dr. Fred Hamann

Title: TBA

Location: Powell Hall, Florida Museum of Natural History
(*Lucille T. Maloney Classroom*), UF Campus,
Gainesville FL



Dr. Fred Hamann,
Professor of Astronomy,
University of Florida

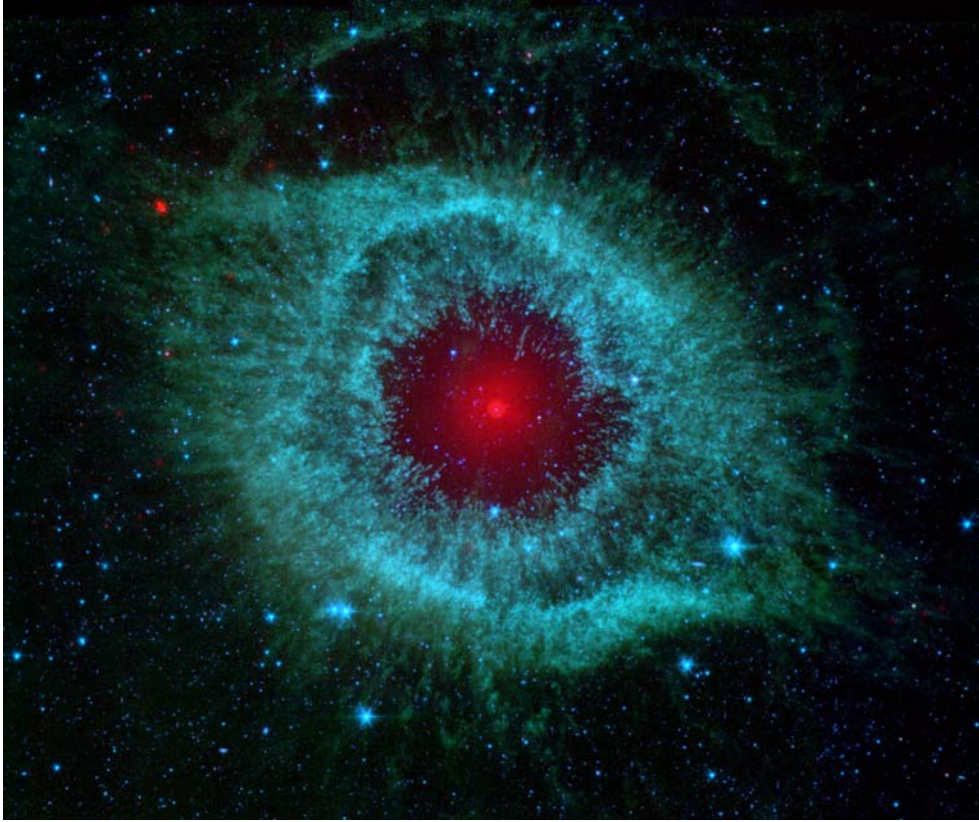
About the Speaker: **About the Speaker:** Dr. Hamann received his Ph.D. at the State University of New York at Stony Brook (SUNY) in 1987, and subsequently worked as a research fellow at the Carnegie Observatories, the Ohio State University, and the University of California at San Diego, before joining the faculty at UF in 1999. Main interests are studies of quasars, active galaxies, galaxy evolution, early-epoch star formation, elemental abundance evolution, circumstellar environments of pre- and post-main sequence stars, nebular astrophysics.

Professor Hamann is becoming a tradition at AAC meetings. He has unselfishly spoken to the AAC numerous times in past years including May 2004 (*Twinkle, Twinkle, Huge Explosion: The Story of Gamma-Ray Bursts*), February 2005 (*From Darkness Into Light: The End of the Dark Ages*), and July 2006 (*Life on the Edge: The Story of Eta Carinae*). His wonderful talks are always interesting, informative and enthusiastically received. And they are easily understandable by even novice star gazers.

STAR PARTY / OBSERVATION SCHEDULE: Upcoming Events - 2010

<u>Star Party Event</u>	<u>Date</u>	<u>Location</u> Check the website for directions	<u>Start/End Time</u>
Stargazing at Hickory Ranch	January 16th, Saturday (rain date Feb 13th)	Hickory Ranch at Paynes Prairie	6:30 pm to 9:00 pm Sunset approx. 5:50 pm EST
Starry Starry Night at The Villages	February 20th, Saturday	The Villages Polo Fields, Ocala	5:00 pm to 11:00 pm
AAC March Star Party	March 13th, Saturday (rain date: March 20th)	Bob Duval's Residence Chiefland Astronomy Village	Starts at sunset approx 6:35 pm

Correction: Starry Night Photos on pages 12 and 13 of the November/December Firstlight were taken by a photography crew from the Florida Museum of Natural History. The Firstlight newsletter stated otherwise.



Dust and the Helix Nebula

NASA, JPL-Caltech, Kate Su (Steward Obs, U. Arizona) et al.

Explanation: Dust makes this cosmic eye look red. The eerie Spitzer Space Telescope image shows infrared radiation from the well-studied Helix Nebula (NGC 7293) a mere 700 light-years away in the constellation Aquarius. The two light-year diameter shroud of dust and gas around a central white dwarf has long been considered an excellent example of a planetary nebula, representing the final stages in the evolution of a sun-like star. But the Spitzer data show the nebula's central star itself is immersed in a surprisingly bright infrared glow. Models suggest the glow is produced by a dust debris disk. Even though the nebular material was ejected from the star many thousands of years ago, the close-in dust could be generated by collisions in a reservoir of objects analogous to our own solar system's Kuiper Belt or cometary Oort cloud.

