

Hubble website photo probes mysteries of galaxies

by Aimee Pogson
staff writer

A picture is worth a thousand words and sometimes one can even resolve a scientific controversy. This was proven recently when a photograph taken by Dr. Roger Knacke, director of the School of Science at Penn State Behrend, was featured on the Hubble Heritage website for the month of October.

The site is made up of different images taken from the Hubble telescope, an instrument that orbits around the earth and is capable of seeing and taking pictures of objects in deep space. Dr. Knacke's picture shows NGC 4319, a spiral galaxy (the larger object), and Markarian 205, a quasar (the smaller object). A quasar is a distant galaxy with a very bright core that emits large amounts of energy, possibly because of a black hole at its center.

At first glance this appears to be just another picture, but there is a mystery behind these two objects that has intrigued astronomers for almost three decades. The galaxy and the quasar are very far away from each other. NGC 4319 is 80 million light years away from the Earth, while Markarian 205 is 1 billion light years away, yet they appear to be connected by a faint arm of gas.

By looking at their position in the picture it appears that Markarian 205 lies within the spiral arms of NGC 4319. If the quasar and the galaxy actually were at the same distance away from the Earth this would show an error with the astronomers' redshift method of measuring distance that indicates whether an object is moving farther away (a shift to red) or coming closer (a shift to blue). An error like this would upset some of the foundations of astronomy.

The debate went on. Some astronomers insisted that there was something wrong with the relationship of the two objects, that they were actually connected and the methods of measuring distance had to be reexamined.

Meanwhile, other astronomers simply said that it just appeared Markarian 205 was at the same distance as NGC 4319, due to the distance and position of the two objects. It was no different than looking at a person and a tree at a distance. Even though the person and tree may be far away from each other, the viewer looking at them from a distance sees them as superimposed on each other and positioned at the same distance.

This is when Knacke suggested to Keith Noll, a speaker at Behrend's "Open House Nights in Astronomy" and one of Knacke's former students, that they take a good, clear picture of Markarian 205 and NGC 4319 and resolve the dispute once and for all. Noll agreed. They decided to use the Hubble space telescope to take the picture. Knacke didn't actually get to use the telescope, but he told them where to point it.

There was not a lot of research involved in tracking and pinpointing the objects because, as Knacke pointed out, "galaxies do not move in a

Allies and Trigon celebrate diversity

by Caley Doran
staff writer

On Oct. 11, the Allies Program, a branch of Trigon new to Penn State this year, hosted a luncheon titled "Allies Come Out" in the Reed commons.

The Allies program is a club for heterosexuals who support and celebrate diversities related to sexual orientation.

An ally is a person who respects all people despite differences such as age, sexual orientation, or race. An ally expresses an interest in equity and diversity issues concerning all people.

Allies coordinator Jaimi Bonczar said the purpose of the event was "to be visible on campus and to get people to sign our pledge as Penn State Allies in a fun and welcoming atmosphere."

The guest speaker at the lunch was English professor Dr. John Champagne. His speech was loosely based on Michael Warner's book, "The Trouble with Normal," and the responsibility of everyone in the Behrend community to support one another, gay or straight. Students and faculty in attendance enjoyed a lunch catered by Housing and Food Services consisting of Italian stuffed shells, chicken tenders, chicken wings, mashed potatoes, tossed salad, pasta salad, and fresh vegetables.

There are many different ways to become an ally, such as using the word "gay" instead of "homosexual" or vocalizing intolerance of jokes that attack people of other sexual orientations. The Allies program meets every Thursday at 12:15 p.m. in the MCC.

On Oct. 2, Trigon, along with Protestant Campus Ministry, SAF, and Residence Life, sponsored speaker Brent Scarpo, who presented the documentary film he directed, produced and titled "Journey to a Hate Free Millenium." According to Trigon President Abbey Atkinson, the purpose of the presentation was "to raise awareness about hate crimes and prejudice; to point out our human commonality beyond race, religion, creed, ethnicity, sexual orientation, gender, etc."

The film dealt with hate crimes in relation to three

major stories concerning the issue. Those stories included Matthew Shepard, a gay college student in Wyoming, who was brutally murdered; James Byrd, an African American man who was dragged to death in Texas; and the Columbine student shootings. At the end of his presentation, Scarpo presented all those attending with a thimble and instructed them that when they came to a trying time in their lives to take it out and "fill it with hope, love, and respect."

Scarpo, a graduate of Mercyhurst College, started the program three years ago and since then has presented at approximately 200 colleges, 100 middle and high schools, and 200 conferences.

"I have spoken in every U.S. state except for three and my personal goal is to do every U.S. state by the end of the year," said Scarpo. "It has been an amazing journey." Trigon also organized Erie

County Pride Weekend September 6-8.

On Oct. 23 at 7:30 p.m. Trigon presented "If These Walls Could Talk" in celebration of Gay and Lesbian History month. Free snacks were provided.

Trigon also had a table outside of Brunos this past week to raise awareness about gay and lesbian history. There, members also accepted donations and distributed rainbow ribbons. Trigon is hoping to bring pieces of the AIDS quilt and a speaker from the White House concerning AIDS to campus and to sponsor open forums on diverse topics.

"Trigon is a thriving organization this year," said Atkinson. "Our Allies program is expanding and we have a great deal of allied members who are not afraid to be associated with us. It's beautiful...the support we've been asking for all along is finally beginning to form!"

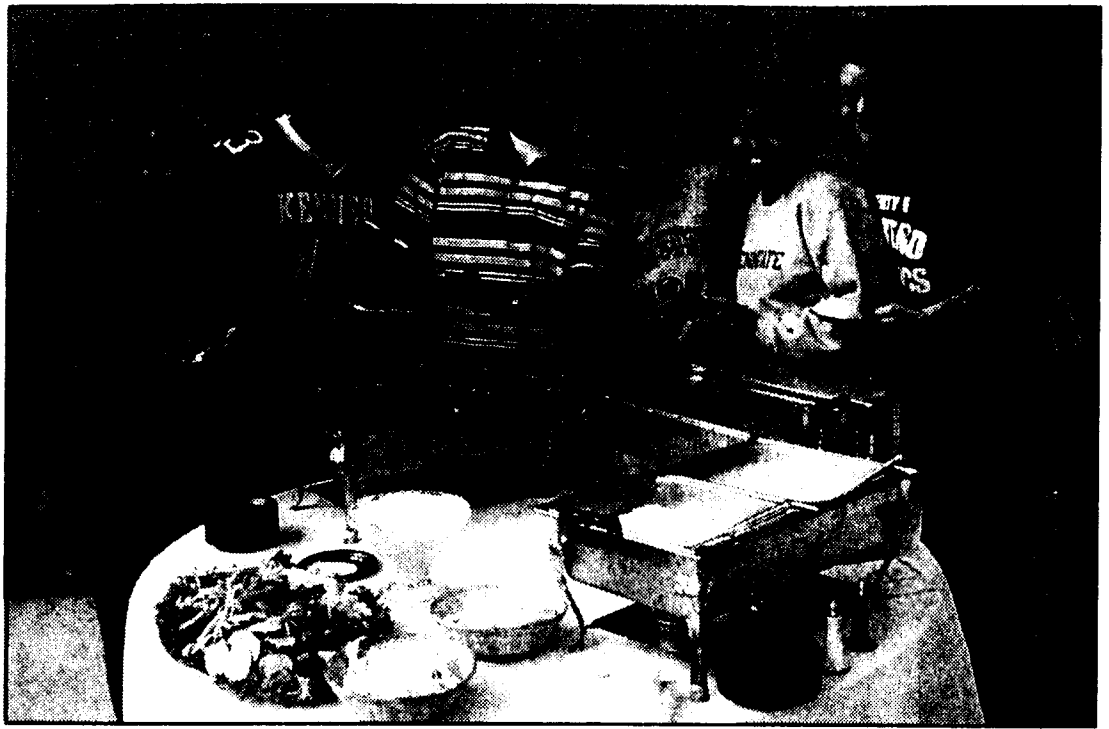


PHOTO BY KEVIN FALLON / BEHREND BEACON

Behrend students show their enthusiasm for diversity at the Allies Luncheon on Oct. 11. The event featured a lecture by English professor Dr. John Champagne.

human lifetime." The position of the objects had already been recorded and there wasn't much research involved in finding them.

The resulting picture was a clear image of the large spiral galaxy of NGC 4319 and the quasar Markarian 205. Markarian 205 still appears to be a part of NGC 4319 and there is an arm of gas that looks like it is connecting them, but the photograph also reveals many arms of gas coming off of NGC 4319 that aren't connected to other objects. That suggests the gas may just be a characteristic of NGC 4319 or even a part of Markarian 205. This doesn't suggest that the two objects are linked. Knacke believes that this picture will put an end to the debate.

"Had we had this image 30 years ago this never would have happened; it would have convinced them," commented Knacke.

Some astronomers may never be convinced though. They still insist that there is something abnormal about the two objects, but so far photographs are the best evidence astronomers can gather. Maybe this is just as well; probing mysteries is part of the spirit of astronomy.



CONTRIBUTED PHOTO

This photo of NGC 4319, a spiral galaxy (the larger object), and Markarian 205, a quasar (the smaller object) is featured on the Hubble Heritage website this month. The picture was taken at the suggestion of Dr. Roger Knacke, Director of the School of Science.

Visiting professor Aleprete explains International Studies

by Alyssa Peconi
staff writer

Michael Aleprete, a recent addition to the Behrend teaching staff, has many responsibilities to take on this semester.

Aleprete is the new visiting assistant professor to the International Studies department. He is currently teaching two sections of International Studies 100, and the International Studies seminar 400.

A native of the Pittsburgh area, Aleprete is a stranger to the Erie area. He attended his first four years of college at Duquesne University in Pittsburgh and then went on to complete graduate school at the University of Pittsburgh.

Aleprete is fluent in the area of International Studies, having previous experience teaching as a graduate assistant at the University of Pittsburgh for a few years, one year at Duquesne University, and also one year at Berry College in Georgia.



PHOTO BY ERIN McCARTY / BEHREND BEACON
International Studies professor Michael Aleprete has joined the Behrend faculty as a visiting assistant professor for the year.

Though new to the Penn State Behrend community, Aleprete calls it "half big university," because the administration is big on rules, despite the small size of the campus." Also, he notes that Penn State Behrend has many advantages despite being a small campus, because "everyone has access to PSU resources, though we are not University Park. It is a small environment with superior research support."

After discussing his field of study, Aleprete cleared up exactly what International Studies entails. International Studies is an interdisciplinary minor that introduces students to global and multicultural issues. The idea is to broaden students' understanding of the connections that link peoples across international boundaries.

Many of the students who take the IS minor are planning careers in professional or academic fields where there are strong international elements - business, politics, law, arts and humanities, and social sciences. "The minor gives them an opportunity to focus on these international connections from a multi-disciplinary perspective," said Aleprete.

The historians and political science majors get to discuss these issues with business majors, engineering students, and people involved in theater. Each group of people brings their own perspective to relevant global issues.

Aleprete began to develop a passion for International Studies while he was an undergraduate student, at the time of the fall of the Berlin Wall in 1989.

"It was an interesting time period and my attention was immediately turned in an international direction," he said. He also feels that IS is a relevant issue today, because of the recent tragedies of Sept. 11.

"It is interesting to see the reactions of students after the tragedies of Sept. 11, because it made international issues even more salient," said Aleprete.

The 31-year-old visiting assistant professor

moved to the area in August from a small suburb slightly north of Pittsburgh. Growing up in Pittsburgh, Aleprete is an avid Steelers football fan. He enjoys various activities such as dancing, traveling, and reading the Behrend Beacon (especially the humor page), and also has an interest in theater arts.


Aleprete is on a one-year contract at Behrend. He is temporarily replacing Dr. Davies, the permanent IS professor who is on leave in York, Canada. However, Aleprete is very enthusiastic about teaching the International Studies Seminar.

In fact, he is the first professor to teach this course because this is the first year it has been offered here at Behrend. He also plans to teach a senior level American Foreign Policy course in the spring semester.

The professor advises his students to read ahead of time before the test. He also emphasizes that discussing the material helps retain information in a better manner.

"There are two methods of learning, reading and hearing," he said.

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