

# Astronomy Open House takes on mystery of 'The Black Hole'

by Kristen Sedlak  
staff writer

The Black Hole, a mystery which has bewildered humans for many years, was the topic of the final lecture of the Behrend Astronomy Series on Thursday, March 23. Dr. Darren Williams, assistant professor of physics, was the featured speaker and delivered his information to a capacity audience.

Beginning with a dramatic scene from the Disney movie *The Black Hole*, Williams first set to point out what a black hole is not. It is not a vacuum, garbage disposal, or

otherwise. A black hole is merely a star that has become so dense that it collapses inward.

Williams further explained that the reason black holes appear to be black is that their density (and thus, their gravity) levels are so high that even light cannot travel fast enough to escape their nothingness.

This involves the "escape velocity." Escape velocity is basically how fast something would have to travel in order to break through the orbit and continue traveling away from the black hole. "Because of this, we know virtually nothing about what is under the surface of the black hole, or 'event

horizon,'" Williams commented.

Williams also explained that stars evolve by transforming the elements inside them, right down the periodic table, until they run out of energy. After producing carbon, a low-mass star, such as a white dwarf, eventually becomes dormant and collapses. A high-mass star such as the sun, however, would have a much different reaction. As its size enables it to continue producing new elements, it becomes more and more dense (stopping finally with iron), until it becomes either a neutron star, or a black hole.

A simple and brief physics lesson

followed, with Williams teaching the audience how one would go about measuring the mass of a black hole and its orbital speed by using the Doppler effect.

Williams is an assistant professor of physics at Penn State Behrend, and also a graduate of Penn State. He has continued his astrophysics research here at Behrend, and has had his work published in the scientific journal *Nature*.

For more information on black holes, Williams suggests the book *A Brief History of Time - From the Big Bang to the Black Hole*, by Stephen W. Hawking.

# Artwork catches eye in Academic Building

by Kathleen Perry  
staff writer

Plain cinder blocks used to surround students as they walked down the hallways of the Academic Building. Now artwork welcomes students entering the second floor of Academic.

In order to spruce up the walls of Academic, Dr. Barbara Miller, a lecturer in integrated art, was put in charge of choosing some prints to be purchased by the University and hung on these plain walls.

Dr. Miller was there from start to finish, putting in extra hours. Responsible for the project, from doing research on specific pieces to ordering the artwork from the Internet, she did all but hang the frames on the walls. Dr. Miller was limited to choosing pieces that were classified as abstract art and she was interested in displaying art, from varied cultural backgrounds and by artists of both sexes.

Russia, Mexico and the United States are just a few examples of the origins of the chosen pieces, and women are responsible for the creation of one third of the pieces displayed.

One of the most intriguing, and always controversial, pieces of art placed in the Academic Building is *Nude Descending a Staircase*. Presented by its creator Marcel Duchamp in the 1913 Armory Show, it is known as the piece that introduced modern art to America, and has always been a hot topic of discussion in the art world.

Miller has noticed students stopping in the hallway to look at the artwork, and she has heard through the grapevine that some Behrend students have even used the pieces as topics for class writing assignments. According to Greg Cooper, "The artwork is very nice, it adds atmosphere to the area, and provides an escape from the boredom of a normal classroom environment."

# Amnesty International to have speaker

by Anne Rajotte  
contributing writer

The death penalty in the United States is an issue that is frequently debated. George White, CEO of an anti-death penalty group called Journey of Hope, has a unique perspective on the topic. He will be speaking at Penn State Erie, The Behrend College, on Wednesday, April 5, at 7:30 p.m. in the Reed Commons.

In 1985 White and his wife, Charlene, were victims of an armed robbery. White survived despite three gunshot wounds, but Charlene did not.

White was arrested for the murder of his wife, convicted, and sentenced to life in prison. He was incarcerated for over two years before his conviction was overturned, and he was found innocent.

Today, White honors his wife's

memory by sharing his experience and perspective with others. "Charlene White loved life . . . that should be her legacy. What began with a horrible act of violence should not be memorialized by an act of vengeance," White stated.

His speech is being sponsored by Amnesty International and the Student Activities Fund. Ray Morelli, co-president of the Behrend chapter of Amnesty International, commented, "I have had the opportunity to hear George White speak in the past. I am excited to bring him to Behrend so he can share his story and create awareness about the issue of capital punishment at our school."

The event will be followed by a candlelight vigil on the Reed Lawn and refreshments.

Amnesty International holds meetings every Wednesday at 5:15 p.m. in Reed 113.



PHOTO BY MIKE FRAWLEY

Matt Grimmke and Katie Galley take in some culture in Behrend's Academic Building. The artwork was bought by Behrend with the efforts of Dr. Barbara Miller.



# Demian Blair for SGA President

Mike Frawley for SGA Vice-President

If elected we will work on such issues as : student involvement, the student website, the campus network, parking on campus, the info tech fee, and a lounge for commuter students.

Much can be done to make Behrend a better school, and we are willing to do what it takes to make these changes happen!

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