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## **Crowd is aiming at the stars Astronomy group holds 3rd Starfest at Anna Maria**

By Matt Kane SPECIAL TO THE TELEGRAM & GAZETTE □



*Carl Altobelli of Hubbardston aligns an 8-inch telescope with a magnification of 1,000. (T&G Staff/MARK C. IDE)*

PAXTON- More than 250 people squinted through telescopes, tried on spacesuits and attended astronomy workshops at The Aldrich Astronomical Society's third annual Starfest Saturday evening at Anna Maria College. Although the feature events were located in the night sky, Society President Jim Zebrowski said that the organization used a "down-to earth" approach to teaching astronomy at the event.

"We're not talking about highbrow science. We're talking about bringing it down to earth, making it practical and making it real," said Mr. Zebrowski, as he prepared to deliver a comet-making workshop.

While Mr. Zebrowski added ammonia and dry ice to his celestial mix, star-gazers scanned the heavens through telescopes in the field behind the St. Joseph Hall science building. Peering through a black, cannon-like telescope called a Newtonian Reflector, Edward Sanchez, 10, and Mark Laporte, 11, observed Jupiter and three of its moons. Jupiter, which is approximately 550 million miles away from Earth, appeared as a tiny white circle and its moons as white specks. "It's pretty cool," said Edward, who attends West Tatnuck School in Worcester.

Mark, who also attends West Tatnuck, agreed but moved to another telescope, hoping to get a glimpse of his preferred planet. "I like the color of it," he said, referring to Mars. "I believe there's life on it."

The telescope belonged to society member Jim Fraser, 47, of North Brookfield. "Jupiter actually has 61 moons and tonight we can see three of them," he said. "To have a night like this without clouds is really nice."

In a classroom inside the science building, children tried on the nylon, outer layer of the Apollo spacesuit, basically the same type that Neil Armstrong wore when he walked on the moon.

"The helmet's a little heavy," said Christopher Stalmok, 10, of Paxton, as volunteers snapped on the rotund plastic head-piece and slid the tinted lens down in front of his eyes. "It's not that hot," he commented, as he lumbered in the baggy, white outfit.

In another classroom, three West Boylston High School students provided a workshop on microgravity. Nathan Bricault, 13, explained how the international space station and other objects orbiting the Earth are not immune to gravity but rather are constantly falling around the Earth. To demonstrate how this state of free-fall, called microgravity, affects various objects, the students used a

homemade microgravity demonstrator, consisting of a clear glass box hanging on the end of a rope.

During one experiment, Nathan placed in the box a vertical wooden rod with two ring-shaped magnets separated vertically by magnetic repulsion.

"What do you think will happen if you put it into microgravity?" asked Nathan, speaking to an audience of young children and their parents.

A small hand in the front row shot up immediately. "It will kind of rise," guessed Sushant Raj, a soon-to-be second-grader at the Shrewsbury Montessori School.

Nathan released the rope and let the glass box fall to the floor. A tiny video camera in the box captured the free-fall, transmitted the recording to a nearby television screen and sure enough, the top magnet flew up. He explained to the wide-eyed youngsters that objects in a state of free-fall behave as though they lack gravity, so the upward force of the bottom magnet outweighed the downward force of the top magnet.

Other workshops included a lecture on meteors by Bob Mersereau and a demonstration of astronomical computer tools by Bob Peloquin.

"That's the international space station we're about to crash into," said Mr. Peloquin, as he operated a virtual spacecraft on a computer screen using the Orbiter computer program. He also demonstrated Stellarium, planetarium software that displays a clearer picture of what one sees when looking at the night sky.

The Aldrich Astronomical Society is a group of amateur astronomers based in Central Massachusetts dedicated to observational astronomy, or stargazing, and telescope making. Group members come from all walks of life - plumbers, electricians, and engineers - but "they're all united by learning about the night sky," said Mr. Zebrowski.