



Search

 Chron.com Web Search[Advanced search](#) | [Archives](#)powered by **YAHOO!** SEARCH

HOUSTON CHRONICLE ARCHIVES

Paper: Houston Chronicle

Date: THU 12/10/1998

Section: Houston

Page: 1

Edition: 2 STAR

CELESTIAL RENOVATION / Revamped planetarium brings space closer to home

By BRUCE WESTBROOK

Staff

Kids, this isn't your parents' planetarium.

The Houston Museum of Natural Science's Burke Baker Planetarium - a fixture for school children and museum visitors since 1964 - is entering a new dimension.

In fact, when it reopens Friday after three months of revamping, the planetarium will be new not just for Houston, but for the world. The refurbished facility is the first full-view immersive video theater.

Say what?

For starters, seeing a planetarium show from now on will be more like taking a Star Tours theme-park ride - the one where you seem to swoop through the universe - only without the stomach-churning motion simulators.

The key is SkyVision, a new high-resolution projection system developed by Sky-Skan, a New Hampshire-based multimedia firm.

With SkyVision, instead of seeing a static starscape from one angle, you'll embark on a virtual space flight, seeming to fly past celestial bodies that sprinkle the entire planetarium dome.

To better display images produced by an elaborate new system of computers and video projectors, the planetarium's interior dome has been tilted by 6 degrees, and its 194 seats are on a slanted floor. As a result, viewers see visions of space one might get from actually exploring the universe, not just peering from afar.

"The further back your fourth-grade experience was, the less you saw," said Dr. Carolyn Sumners, referring to the fourth- and seventh-grade field trips the museum has hosted for decades. "Old shows were static, but space is constantly moving.

"It (the planetarium) is more of an IMAX venue now. We're making space as real as it can be."

Yet Sumners stresses that the planetarium redesign - achieved in the past three months while it was closed - "is not about entertainment."

"Entertainment is somebody's else's job. That's not us," the museum's director of astronomy and physics said. "It's true we are nudging more into the entertainment realm, but our job is to be science-

future, not science-fiction."

Still, comparisons will be common, especially since SkyVision involves heavy use of the same computer animation that provides so many special-effects shots in today's movies.

But those often come at the expense of reality in the movies.

"Thanks to ``Star Wars" and ``Star Trek," I think people really believe the universe is a much tighter and closer space," Sumners said.

"But the movies cause kids to come in here with much higher interest in space. All we need to do is put things in the proper context."

As much as 90 percent of a SkyVision show will come from the computer animation that's driving films from ``A Bug's Life" to ``Star Trek: Insurrection." The rest relies on photography.

"This is the next logical step for planetariums," said Steven Savage, Sky-Skan's president.

"They've evolved from slide projectors to video projection to this - multiple projectors that do all the geometry correction and smoothly play back high-resolution images with movement and in an immersive way."

Savage says all he's done "is invent a delivery medium. Now we're teaching (computer) artists how to use this environment to express visions in a new way."

Houston's first looks at the new process will be ``Cosmic Mysteries" and ``The Magnificent Journey - The Story of the Magi," both opening Friday.

The first features music from Gustav Holst's ``The Planets" and will use moving full-color animation and more than 60 special effects to show how stars are born and die.

``The Story of the Magi" is a new version of traditional Christmas planetarium shows, focusing on the Star of Bethlehem. Viewers will seem to fly over the present-day Holy Land, tracing the route the Wise Men took to Judea and probing astronomical explanations for the star that guided the Magi.

To celebrate opening weekend, both programs will be shown at 7:30 p.m. Friday and Saturday with the season premiere concert ``Planet X" by Houston's OrchestraX. For tickets to the special presentation, which are \$15 for students and seniors and \$23 for adults, call 713-225-6729.

The two new planetarium shows run about 22 minutes each, or about half the length of previous shows.

"Twenty-two minutes is plenty," Sumners said. "It's all people want.

"We used to be able to lecture about the night sky with a pointer for 45 minutes, and people bought it. It's like first seeing ``Star Trek" in the '60s. It looks campy now, but it looked great then."

The upgrade cost \$1.3 million, of which \$260,000 came from a NASA grant through Rice University. Also underwriting the renovations were the Friedkin Foundation, NationsBank and the Houston Museum of Natural Science Guild.

NASA's grant provided four new projectors and six computers. NASA also provides photography from its space missions, as well as never-seen images from the Hubble Space Telescope.

But it's a two-way street for the space agency.

"All the shuttle astronauts train here," Sumners said. "Here they can see the stars as they'll look from the shuttle, getting comfortable from different directions.

"We can create their actual mission, orbit by orbit, by computer, so they can nail down where they are and fix their bearings in space."

The planetarium's new features won't expand that service, "but it will help NASA," Sumners said. "NASA spends the public's money, and this helps for things to go back to the people who paid for them."

Project leader on the grant is Dr. Patricia Reiff, chairman of Rice's Department of Space Physics and Astronomy.

"Now that planetarium shows are all digital, we'll distribute them nationally and internationally," Reiff said. "We are the first in the world - the first university-museum consortium to put live data into an immersive planetarium."

(A second SkyVision planetarium will open in Japan next year.)

Upcoming shows will include a look at the moon that's far different from past planetarium shows.

"We used to show slides and maybe a panorama from Apollo, maybe a little 16mm film," Sumners said. "That was all we could do."

"Now, we'll go from showing the moon as seen by the human eye - a fuzzy thing - to a place with craters and mountains, a real place with its own topography. We'll create that visually and virtually land you on the moon."

But beware attending if you've got a stiff neck.

"Since we use the entire sphere for a 360-degree image, there's more to look at," Savage said. "It's like being outdoors. You can look in all directions. So come with a good healthy neck."

A good healthy imagination wouldn't hurt, either.

"Humans are a long way from traveling beyond the inner planets," Sumners said. "Space is a place most of us never can go ourselves. But with this new planetarium, we can bring space to us."

...

Burke Baker Planetarium ``Cosmic Mysteries" and ``The Magnificent Journey - The Story of the Magi"

Where: Houston Museum of Natural Science, 1 Hermann Circle Drive in Hermann Park.

When: Various times daily. For show times or to purchase tickets, call 713-693-4629.

Tickets: Each show costs \$3 for adults and \$2 for museum members, seniors and kids 3-11.

Copyright notice: All materials in this archive are copyrighted by Houston Chronicle Publishing Company Division, Hearst Newspapers Partnership, L.P., or its news and feature syndicates and wire services. No materials may be directly or indirectly published, posted to Internet and intranet distribution channels, broadcast, rewritten for broadcast or publication or redistributed in any medium. Neither these materials nor any portion thereof may be stored in a computer except for personal and non-commercial use.

