New York’s new ‘cosmic cathedral’

The Rose Center for Earth and Space: ‘It isn’t religion but scientific education that the pilgrims are coming for now’
from behind the giant orb. The Cosmic Pathway, a 108-metre ramp radiating out from the sphere’s equator that details the 13 billion-year history of the universe, appears to destabilize the equilibrium of the space as it snakes itself around the sphere’s bottom half.

The centre’s entrance, which some have criticized for being too low-slung for such an impressive structure, is a quiet wink at a sunrise. And the entire enterprise feels like — well, a lot like the Starship Enterprise or a science fiction space port, all smooth white synthetic surfaces.

James Pohshek, the project’s lead architect, cites inspiration such as Eero Saarinen’s design for the Grotto at Fari Isaac Newton and Wallace K. Harrison’s Perisphere at the 1930 New York World’s Fair.

But a child raised on recent science fiction — and the planetarium is there to inspire children, after all — can’t help but see it as a white version of the Death Star from filmmaker George Lucas’s Star Wars series. The Hayden Sphere possesses the same grandiosity, the same perforated texture, and even the same concave parabolas at its equator as Darth Vader’s malevolent terrain.

And the Hayden’s mission is good, not evil, Pohshek said. His primary goal was to make the museum’s scientific mission more appealing to the public.

“I have taken to calling this a cosmic cathedral,” he said recently.

“When one thinks about the similarities to real cathedrals in the Middle Ages that attracted millions of pilgrims coming to a dark Europe, to those great spaces, coming for religion into those monumental volumes . . . today this too is a kind of cathedral. It isn’t a religion but scientific education that the pilgrims are coming for now. The architecture is intended to enthuse and support — and frankly awe — so people will return again and again to study the scientific principles of astrophysics and astronomy.”

One of the centre’s most impressive features is its pair of glass curtain walls. Supported by more than four kilometres of rod rigging, the walls are constructed from almost an acre of glass — 736 individual panes of Pilkington white white glass that gets its name from the fact that it has been purified of the iron that tints most glass a slight green. Looking through the glass offers a slightly hypereal effect, like finally seeing the world from behind perfectly fitted eyeglasses after a lifetime of blurred vision. There is a magnetic pull drawing you in from the outside. From inside, the grand residences of the surrounding Upper West Side are even more charming set within the frame of an ultramodern glass curtain wall.

“The glass is really important in terms of the mission and the strategy of this institution, namely to debeck the science and make it transparent, accessible and comprehensible.”

The glass of the Rose Center for Earth and Space, a made-in-Canada display.

The glass certainly had the desired effect on those who turned up Saturday afternoon. “You see it from outside and it just makes you want to come in.” It invites you in,” said George Pavey, standing on the Cosmic Pathway, within an arm’s length of the giant sphere. “From here, when you’re this close, it feels like you’re in space.”

“It would be difficult to remember the last building New Yorkers embraced with such immediate favor. Philip Johnson’s AT&T Building, which went up in the 1980s, was widely admired but far from a universal hit. The recently opened LVMH Tower on 57th Street is a quiet success, it is, after all, just another office building. The planetarium, on the other hand, is not just an impressive new building but a perfect marriage of form and content.”

“This is architecture in the service of science,” said Ellen Futter. “For example, the sphere is the dominant shape in the universe, so visitors entering the hall are presented instantly with an icon that is reinforcing of one of the big ideas. There is a synergy between the architecture and the science, and I think you feel a seamlessness and a flow between the content and the setting.”

“Yeah, whatever,” said freckled-faced 10-year-old Sarah Presky, who was one of more than 16,000 visitors to the museum on Saturday. “I like the exhibit where they showed how the planets were formed,” she said, passing by a 3.69 billion-year-old rock from the Northwest Territories donated by the Royal Ontario Museum. “It’s all just really cool.”

Handwork is strategically placed around the planetarium’s nine-storey orb. The planets — Jupiter, Saturn, Neptune, Uranus, Mars, Venus and Earth — are built to scale at a factor of 10.

Pluto, no longer considered a planet, was left out. Good thing, too. May adds, since it would have been roughly the size of a pea. On the night Research Casting’s crew installed some of the bigger celestial bodies, May recalls, “we walked outside and looked up, and there was the moon above the planetarium. And there was Saturn and Jupiter directly above us. We’d just finished installing them and there they were. It was beautiful. A little eerie.”

“I don’t know if it was a sign or anything. But everyone was so tired, it became one anyway.”

Research Casting’s planet exhibit is one of many the 13-year-old company has done for the American Museum of Natural History in the past decade.

It built a rearing, five-storey tall Barosaurus defending its young from an attacking Mosasaur in the museum’s main rotunda and last year a handful of staff traveled to exotic locales to make molds of important geological features around the world. The group went to the lava fields in Hawaii, made imprints from volcanic ash in Pome- peii, replicated rock upheaval in California and took molds in New Zealand that show the building of the Alps. All are now part of the Rose Gallery’s Hall of Planet Earth exhibit.

So what’s next?

“We could build up Stonehenge. Go to Easter Island. Do the Sphinx,” laughs May. “Well, that’s getting a little big. The only thing holding us back is our imagination.”