Diehl, Travis. "COSMIC THING: Travis Diehl on KNOWLEDGES at the Mount Wilson observatory," *Artforum*, 4 August 2017.

## ARTFORUM



Erik Frydenborg's sculptures at the Mount Wilson observatory's visitor center. (All photos: Eden Batki for KNOWLEDGES)

FOR SOME PERSPECTIVE, SOME ART: In 1917, the year Duchamp signed a urinal, the one-hundred-inch reflecting telescope on Mount Wilson saw what astronomers lovingly call "first light." The cost of a certain Basquiat would build the so-named Hooker telescope and dome ten times over. Its famous mirror alone took five years to coat and polish—as long as a Koons balloon dog.

But to really get a feel for the instrument that bounced light at the retinas of Edwin Hubble and Albert Einstein, and that first gauged the redshift of our expanding universe and peeped a galaxy beyond our own—it helps to see it up close.

Recently I got my chance: As part of a two-day festival of art and stars that organizer Christina Ondrus called KNOWLEDGES, the telescope's vaulted steel chapel was home to a new composition by artist Scott Benzel. The audience sat gaping at that big periwinkle-blue tube on its goliath gray mounts, built with the sturdy confidence of an ocean liner, all riveted and fresh. Then the stories-high dome's doors groaned apart; Benzel stood and struck an anvil with a hammer (PLINK!! reverberating into the girders), and a four-piece chamber orchestra launched into a brittle score that blended Pythagorean harmony with Hubble's esoteric math. Three dancers, dressed in street clothes in telescope grays and blues, climbed out of the observation well, pushed the railing, were pulled by it, and moonwalked while the telescope began to spin. A wedge of sunlight began to sweep around the space—we were moving, not the sun—and the giant instrument rotated too: slowly, smoothly, on a sealed puddle of mercury. The telescope was dancing.

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Dancers in a performance by Scott Benzel.

At KNOWLEDGES, which invited some twenty artists and musicians to stage projects at the observatory, the art-speak commonplaces of reflection, echoing, and lenses had a more technical resonance. Along the path that stretched between the Cosmic Café on one end and the big domes on the other. Alice Könitz installed a handful of obsidian disks which you could use to look directly at the sun—disclaimer: only for a few seconds. Erik Frydenborg adorned the observatory's visitor center and lecture hall with a pair of spindly statues that resemble the covers of pulp sci-fi books. Inside the theater, beyond exhibits detailing the scopes' construction and operation, a video by Jeff Cain composited one hundred years of handdrawn sunspot records at flash-cut speed. It was, in all, difficult to compete with the instruments. On Saturday evening, the theater featured a show of vintage lantern slides selected by Brica Wilcox: The glass positives of galaxies and stars were all right—but the bigger treat were photos in rich grays of the frame of the telescope that made them. The Hooker was the world's largest telescope until 1949. The space money followed the cutting edge elsewhere, and now the big historic instruments are basically training pieces, maintained by acolytes. Exhibit: the 150-foot solar telescope (1910). For KNOWLEDGES, Channing Hansen draped the ceiling of the research station with colorful yarn nets based on false color readouts of solar activity. Meanwhile, the station is also a de facto computer museum, stocked with nonfunctioning equipment, including a Raytheon machine from the 1970s boasting big reels of magnetic tape—and now the solar observer Steve Padilla draws sunspots by hand, with a pencil, on sheets of paper.

It gets hot, it gets cold; it's called weather. There is healthy skepticism, and then there is the pseudo-objective perspective that flat-earths any sense of wonder. Exhibit: sunset through the solar telescope, the pale-yellow circle beamed down onto the paper wavers red on the leading edge, blue-green on the following. A dark speck floats across—an escaped helium balloon and the hard silhouette of an airplane transits the disk. Soon the ragged ground itself rolls over the image. You can make out single blades of grass. "At sunset, this is the place to be," said Padilla, and he was right. The sun comes up, the sun goes down.

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Alice Konitz obsidian sun-viewing disc.

KNOWLEDGES looked different at night. It turns out that LA's lid of smog helps dampen light pollution, so that Mount Wilson, despite being an hour outside the city, still gets crisp skies. On the other hand, it was hard to get around the forested paths under blackout conditions. A grove of hammocks arranged by Krysten Cunningham (in a Cygnus-like configuration, I'm told) burst into black light; spotlights blasted Frydenborg's statues with shadow from below, and the convex mirrors flanking them looked like holes. The Saturday-evening program consisted of very limited concert and viewing sessions in the sixty-inch and one-hundred-inch telescope domes. Sets from White Magic, then Sun Araw, seeped through the smaller dome's corrugated skin, while folks who hadn't sprung for tickets lay around on blankets on the pavement outside.

I'd signed on for a show by Ernest Gibson in the larger dome, but due to some technical problems his refraction of tape loops and reverb never really got off the ground, and instead the set was characterized by ear-assaulting spikes in volume. Gibson wailed something into a distorted mic—"We're going to space tonight, the equipment works a little"— but it didn't work that much, and after waiting for my chance to glimpse a globular cluster through the Hooker's storied lens, I slipped back down the stairs and down the mountain. It was close to midnight. Kids zoomed up and down the curves in their high-gravity cars, doing donuts in the turnouts.



Constance Demby at the Space Bass.

There are two main theories of the multiverse. One is that whenever a particle reaches the juncture of two possible positions, a universe splits—and goes on splitting this way a mindboggling number of times. The other is that successful universes explode into being like Diehl, Travis. "COSMIC THING: Travis Diehl on KNOWLEDGES at the Mount Wilson observatory," *Artforum*, 4 August 2017.

bubbles rising from a quantum foam. The latter is according to Margaret Wertheim, a science writer with a TED talk to her credit, which means she brings esoteric theories down to earth. (What if art had more such advocates?) Exhibit: her lecture Sunday at Mount Wilson. Medieval and Renaissance artists and city planners had a great time snapping their imaginations to the Euclidian grid, but the problem became how far this rational geometry went. And if the answer is forever, is there room for heaven? Thus, Wertheim pointed out, you have odd formal collisions such as an early sixteenth-century fresco at the Vatican by Raphael, where, in the same image, earth obeys single-point perspective, but heaven above does not. Jesus, God, and angels perch on a strip of cloud cover bowed into the illusion of a celestial dome.

Raphael's problem was one of art and science. Long before artists got their mitts on Oculus Rift development kits, VR was how art used science to run philosophy experiments. And is it so crazy to hope that art might, once again, be where those big questions aren't just illustrated but tested? KNOWLEDGES aspired to be such a space. Later Sunday afternoon I ascended the dome with the one-hundred-inch telescope for the final time, for a concert by Constance Demby, the inventor—or at least one of them—of so-called space music. Back against the curvature of the observation platform, in a uniform of blazing cyan and magenta, she bowed and malleted an instrument of her own creation, a fish-bone arrangement of metal rods welded to a thunder sheet called the "space bass." The long tones sang in the dome and in the gut. A bowed rod will resonate exactly one octave lower than a rod half its length. Music is math. Therefore, math is music.