

THE BALLROOMS OF MARS

• THIS SUMMER, STARE SKYWARD •

By Stacey Szewczyk

MY FRIEND STEVIE CATO LIGHTNING USED to drive a myopic septuagenarian movie star to airports and doctor's appointments in her Volkswagen Rabbit. As Cato sat behind the wheel coolly maneuvering the Rabbit through traffic, the grand dame would sit in the back flipping a shaky bird at honking motorists.

"Can they see me, Stevie?" she would ask in the old-world accent of a native language with no words to express what she was communicating to the gaping drivers.

"I hope they can see me," she would finally say.

If any one of us can ogie Uranus and Neptune through a pair of good binoculars, isn't it conceivable that somewhere along the dusty lanes of the Milky Way there exists a race of proboscids, if you like—looking back? There are more stars in the visible universe than there are grains of sand on the beach, fish in the sea and wavelets on the water's surface—squared. In our skies alone there are enough stars to choke an army of Olympian horses and our skies provide a glimpse of only one galaxy among—possibly—not millions—billions. The elements necessary for producing life (a little hydrogen, some helium) are present to some degree in the immediate vicinity of each and every one.

My personal opinion is that where's there's smoke there is generally fire and that the likelihood of life on other planets is probably about equal to that of drawing a spade from an average deck of cards.

Anyone interested in checking it out for themselves will require a high-powered telescope. New York City has a couple of beauties open to the public. One is on the campus of Brooklyn College, but is closed for renova-



MIKE GORMAN

tions this year. The other is at Columbia University, atop Pupin Hall on the north end of campus. You can survey Jupiter's moons and Saturn's sombrero through two of the highest-powered telescopes in the area on the first and third Fridays of each month during the school year. The viewing sessions begin an hour after sunset, are free to the public and draw about 40 people a night. For additional information call the Columbia University Department of Astronomy at 854-3278.

The Ballrooms of Mars

The universe is breathing, pulsating, expand-

ing. Space is rushing out in all directions. Dr. Lee sits in a small office cluttered with papers, books and skulls. There is a lightness and elegance about the doctor's own skull, its high-domed forehead emerging from the crown like the speckled shard of a great bird egg. Lee is among those who believe that we were created by the stars.

As we totter down the main stairway of the Museum of Natural History on Central Park W., Dr. Lee points out the angle of the central statue from which Teddy Roosevelt appears as a horse's ass, and titters. The Hayden Planetarium crouches like an afterthought around the corner. A cross between a high school gym

and a stupa, the humble building quietly smolders, like all institutions devoted to the mute wisdom of physics, in blanched, 50s *Life* hues and odors. We stop at the box office, shell out \$7 each and prepare to spend the glorious sun-drenched afternoon wandering the planetarium's dull institutional corridors. Across the street, parkies are pulsing to roller disco. But Dr. Lee—who insists on mispronouncing my name as Space—assures me that beneath the hoary textbook veneer, summer's true poetry burns and the secrets of celestial mechanics are contained.

Much of what we know about the solar system we've only learned in the last 30 years, as a result of the technological leaps responsible for the space probe satellites of the 1970s and the Hubble Space Telescope. Once the Hubble's problematic lens was repaired to a degree that made it possible to detect a burning cigarette from the distance of Beijing, cosmic exploration began to accelerate at a 21st-Century rate.

Dr. Lee informs me that on a recent afternoon, the estimated number of galaxies quintupled to 50 billion, a pair of previously invisible planets in a distant solar system appeared to be soaking up enough sunlight to sustain life and 90 percent of the universe was revealed to be composed of a mysterious dark matter. I decide that there can be no better time to loll around on the carpet in the Guggenheim Space Theater, listen to synthetic pastorals and contemplate the surface of Pluto along with a group of juice-box toting second-graders.

When I meet up with Dr. Lee again, she's sitting alone in one of the spectral theaters tucked away throughout the building, watching an old science film on sunspots, rerunning every 15 minutes. We spend the remainder of the day in a conversation about gamma rays and polar auroras. Before leaving, I measure

my weight on other worlds. When we step outside into the dazzling sunlight it happens—the world suddenly feels like Laser Floyd in 3-D. For schedule information call the Hayden Planetarium, 81st St. at Central Park W., 769-5100.

Realm of the Nebulae

When the big night finally arrived, Jenny Worsnopp and Arty Kunhardt opted for something a little out of the ordinary and staked out Comet Hyakutake in a local parking lot. According to Jenny's account in *Eye-piece*, the Amateur Astronomer Association's newsletter, they had set up their scope in the sweetest spot on the lot and were taking a midnight donut break when it appeared.

"I could see it through the trees!" wrote Jenny. "It was amazing... Just as soon as we'd say, 'No, I don't see it' it would pop into view."

Both agreed it had a tail and were looking forward to seeing it again on the following week when they expected it to be much brighter and appear a little earlier.

An astute stargazer will look up at night and recognize a handful of constellations. A trained astronomer will know that somewhere out there 88 of them are webbing the heavens. A true space cadet will look up and see the furnaces that forged the materials of our existence. If it's clear out and the heavens promise something spectacular such as the recent passage of Hyakutake through our solar system—all will know where best to watch it and head there in droves.

The best places to starwatch in New York City are the sights of regular events sponsored by the Amateur Astronomers Association of New York. Founded in 1927 by professional and amateur astronomers wishing to promote interest in the science of astronomy and the skies above New York, the association hosts a year-round schedule of events ranging from Caribbean Eclipse Cruises to lectures on galactic archaeology. While members pay a \$20 annual fee, many of the events

they sponsor are free and open to the public.

Scores of people turned out at twilight in early April to watch the lunar eclipse from Belvedere Castle in Central Park. Afterward, members of the AAA ran across the street to the Museum of Natural History to hear Villanova University's Dr. Edward Sion speak to them about Close Binaries and Dwarf Novae. The coincidence of events—described by one member as a "double-whammy"—would have vindicated anyone harboring the notion that our universe is strangely sympathetic to the evolution of intelligent life.

Summer star-viewing takes place on June 21 at Floyd Bennett Field in Brooklyn (rain date June 22) and on June 15 at Great Kills Park on Staten Island. Monthly viewings take place in Staten Island; dates vary with moon phases. July 20 is the projected date for the Starfest picnic, a star-viewing event at the Sheep Meadow in Central Park beginning, like most of the association's Starfest events, with a lecture at the Hayden Planetarium, then proceeding across the street after sundown to view the night sky by telescope. For more information on the association or a listing of upcoming events write to Amateur Astronomer's Association of New York, 1010 Park Ave., New York, NY 10028. E-mail SECRETARY@AAA.ORG or call 535-2922.

Preparing to Board The Mothership

At an auction earlier this year, Sotheby's couldn't give away an original manuscript of Einstein's Special Theory of Relativity. For those of us who came of age when the national interest in and support for space exploration fell (like the smoldering debris of Skylab) while interest in building a nuclear stockpile of Homeric scale grew (with rolling mushroom-cloud intensity) it makes sense.

What is inexplicable, however, is the fact that there are still areas of this country where children aspire to be astronauts. This summer, several thousand sons and daughters of Texas will study the principles of rocketry and practice moonwalking in a Five Degrees of Freedom Training Simulator while home boys and girls from the New York Metropolitan area affect names like Hotdog and Bubba and learn how best to avoid screwing the pooch during a 17,500 mph orbit of the Earth—star children, one and all, riding a wave of energy unleashed, along with space and time, some 20 billion years ago.

Created by the families of the Challenger crash victims and sponsored in large part by a philanthropic foundation and trust, the Buehler Challenger & Science Center, based on the campus of Bergen Community College in nearby Paramus, NJ, currently provides 5th-8th graders with the opportunity to participate in a simulated space mission modeled on the Space Camp programs dreamed up by über rocket scientist Wernher von Braun during the 1960s. The programs currently churn out several thousand pan-American and international graduates a year in Alabama, Florida and California.

Anywhere from 18 to 36 kids take part in each mission with half acting as astronauts while the other half pulls the strings at mission control. Eventually they switch to ensure a well-rounded star voyage. Junior rocket scientists participate in at least two different space missions as well as take part in related activities such as building radios and studying their waves for whispers of the primeval furnace that accompanied the birth of the universe.

While the Challenger facility does not boast a weightlessness chamber, it does get the occasional visit from a bona fide astronaut. For a fee of \$240 per week, children bring a bag lunch and take part in daily one- or two-week sessions, lasting from 9 a.m. to 3 p.m. For information on their summer schedule for

children and events geared toward adults, call the Buehler Challenger & Science Center, 305 Rte. 17 South, Paramus, NJ 07652. (201) 262-0984.

A little closer to home, The Intrepid Sea, Air and Space Museum features a space exploration exhibit featuring two Gemini capsules and a full-sized mock-up of the lunar module. By this summer, the exhibit will also include an interior of the lunar module for general viewing. For those with only a sketchy understanding of the United States Space Program, the exhibit contains a televised CD-ROM-like retrospective of the program's history ranging from the first Russian cosmonauts to the present. For more information call the Intrepid Sea, Air & Space Museum, located at W. 46th St. & 12th Ave., 245-0072.

Celestial Seasonings

For astrologers, the summer teems with stars and legends. It is the season of the summer solstice when the sun reaches its most northerly position. As it moves through Cancer, Leo and Virgo it is the focal point around which all of the planets of our solar system revolve—casting light, warmth and energy our way across 93,000,000 miles of space.

The Cathedral of St. John the Divine will host a summer solstice celebration on June 21. A New Age performance by Paul Winter will take place at 4:30 a.m., during which celebrants can watch the sun rise through the Cathedral's rose window. The performance will last for about two hours and is free to the public. Repeat performances will take place at 7:30 p.m. on June 21 and 22. The sunset concerts, however, will be open to paying ticket-holders only. For more information call The Cathedral of St. John the Divine, 1047 Amsterdam Ave. at 112th St. 316-7540.