The Google Astronomer

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When he wasn't busy developing the JAVA programming language at Sun Microsystems or managing the work of Google's army of software engineers, Wayne Rosing liked to build telescopes.

Telescopes have been a hobby for Rosing since he was a teenager, and astronomy was Rosing's gateway into physics, math and computer programming. Now, recently retired from Google where he was the company's vice president of Engineering, Rosing will turn his attention to a unique telescope project that will provide scientists with a wider, faster, and deeper view of the universe than current telescopes allow.

Throughout his career, Rosing has held management positions at some of the biggest names in the computer industry, including Sun Microsystems, Apple and Google. Despite it all, however, Rosing never outgrew his interest in astronomy. During a break in the mid-1990s, Rosing took a two-year hiatus and traveled to Chile, where he helped build a robotic telescope that mapped the matter and energy filling the space between the stars. Rosing also founded the Las Cumbres Observatory near his home in Santa Barbara, California.

An engineer and manager his entire professional life, Rosing enjoyed the change of pace that being an astronomer and scientist provided. "It's really fun to change gears, write software, get on machines and assemble parts," Rosing said. "It's a real pleasure."

In May of this year, Rosing was named the first senior fellow in mathematical and physical sciences at the University of California, Davis. As part of the position, Rosing will work with Anthony Tyson, a physics professor at UC Davis, on the Large Synoptic Survey Telescope (LSST). The LSST will be a ground-based telescope that combines a wide field of view and an extremely sensitive digital camera—capable of producing 3,000 megapixel images—to provide scientists with a new way of looking at the universe. The LSST is expected to be ready for first light by 2012. While Rosing's exact duties are still being determined, Tyson said Rosing's background will be very useful for extracting knowledge and understanding from the deluge of information expected to pour in from the telescope each night.

The LSST was initially conceived in 1998 as a way to map asteroids and other space objects that stray too close to earth, but its mission was expanded to search for clues about the nature of dark matter and dark energy, a mysterious substance and force that are believed to permeate the universe but which scientists know very little about.

"The [LSST] will help us understand the development of dark matter over cosmic time and help us pin down the nature of dark energy," Tyson told SPACE.com.

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