For Immediate Release

Orbits Lightwave Awarded a SBIR Phase II Contract for Development of a 1060 nm Source Laser

NASA LISA Space Interferometer requires an ultra-stable, low noise and highly coherent source in its search for elusive gravity wave events

Orbits Lightwave, Inc., an innovative supplier of ultra-stable, low noise fiber lasers today announced the award of an SBIR Phase II contract from NASA for the development of a 1060 nm version of its Ethernal™ fiber laser. The goal of the program is to develop a space-qualified, ultra low noise, compact and efficient laser source for NASA's space born Laser Interferometer Space Antenna (LISA) experiments.

By detecting gravitational waves the LISA mission will study the mergers of supermassive black holes, test Einstein's Theory of General Relativity and probe the early Universe, This will help scientists answer age old questions like: How did the Universe begin? Does time have a beginning and an end? Does space have edges? To perform this experiment an ultra stable and low noise source laser is needed to detect minute vibrations in space itself.

Based on a novel and patented "virtual ring" laser architecture, the Orbits laser design enables traveling wave operation in a linear fiber cavity and thus prevents the phenomena known as "spatial hole burning". Eliminating spatial hole burning lowers noise levels and leads to better overall efficiency. Ethernal fiber lasers from Orbits Lightwave have state of the art S/N and side-mode suppression, shot-noise limited RIN, ultra narrow line-width.

"NASA selection of Orbits technology as a possible laser source for the LISA mission is a great testimony to the potential of Orbits "virtual ring" laser technology to break new ground in laser performance," said Dr. Yaakov Shevy, Orbits Lightwave co-Founder and President. "We are very pleased by this award which validates our vision of providing the ultimate in laser performance."

About Orbits Lightwave:

Founded in 1999 and privately held, Orbits Lightwave, Inc. of Pasadena, Californnia, designs, manufactures, and markets Fiber Lasers for sensing, LIDAR, test, and coherent communications. Orbits Lightwave ETERNAL™ products benefit the researcher and system designer alike by providing unprecedented levels of laser performance for sensing, interferometry microwave photonics and other highly sensitive coherent laser applications.

Dr. Yaakov Shevy
President and CEO
Orbits Lightwave, Inc.
Phone:626 795 0667
Fax:508 546 7946
www.orbitslightwave.com
yshevy@orbitslightwave.com

Orbits Lightwave, Inc.
101 Waverly Drive
Pasadena, CA, 91105
Phone:626 795 0667
Fax:508 546 7946
www.orbitslightwave.com
sales@orbitslightwave.com