

Bertin Technologies, partner of the Lazuli Space Observatory, the world's first large-scale private space telescope

Bertin Technologies, a European expert in optical and space optronic systems, announces its contribution to the *Lazuli Space Observatory*, the world's first large-scale private space telescope - part of the [Eric & Wendy Schmidt Observatory System](#) funded by [Schmidt Sciences](#).

An unprecedented challenge

Bertin Technologies has been selected to design, develop, and manufacture the **Integral Field Spectrograph (IFS)**, one of the observatory's three major scientific instruments. This high-precision spectrophotometer will provide **continuous spectral coverage from 400 to 1700 nanometers (visible and infrared)**. Developing such an instrument in just two years is **a technical achievement unprecedented** for the company, demonstrating its agility and excellence in a rapidly evolving space sector.

A project poised to revolutionize our understanding of cosmology, exoplanets, and transient phenomena in the universe

The *Lazuli Space Observatory* represents a breakthrough in space astronomy. Equipped with a 3-meter diameter primary mirror, this space telescope will be able to respond to astronomical transient events in under 4 hours—a remarkable feat for an observatory of this size. With a launch planned before 2028, Lazuli embodies a new approach to space development, inspired by *New Space* methods that emphasize agility and innovation.

Recognized expertise in spectrographic

Specializing in space optical systems, Bertin Technologies also draws on solid experience in large-scale ground-based spectrographs:

- **[DESI Project](#)** (*Dark Energy Spectroscopic Instrument*): Through its Bertin Winlight brand, Bertin Technologies has manufactured, integrated, and tested ten spectrographs, which are crucial instruments for analyzing collected data, enabling significant advances in our understanding of the universe.
- **[MUSE Project](#)** (multi-unit spectroscopic explorer of the *Very Large Telescope VLT*): Bertin Winlight produced more than 2,500 optical components and complex sub-assemblies (image slicers, spectrographs, field splitters, etc.)
- **[PFS](#)** (*Prime Focus Spectrograph*): Among the more than 20 international institutions involved in the design, manufacturing, integration, and testing of PFS, Bertin Winlight was responsible for producing the four spectrographs.
- **[LISA](#)** (*Laser Interferometer Space Antenna*): Bertin Winlight supplies the complex optical system *Beams simulator* designed for ground-based equipment, made up of about 80 ultra-high precision optical components (mirrors, beam splitters, compensators, off-plane mounts, etc.).

A strategic position in the space market

This expertise, combined with our mastery of space constraints, positions Bertin Technologies as a preferred partner for this ambitious project. This major contract confirms its status as a key player in *New Space*. It is part of the company's growth strategy in the sovereign space observation market, driven by the [new SPEO range](#), optical solutions offering high-performance imaging capabilities, and its leadership in **space optical communications** thanks to two key technologies:

- [HP-MUX](#), a high-performance optical multiplexer increasing the transmission capacity of space systems;
- [FiTI](#), an innovative technology ensuring fast, robust, and low-latency optical communications for orbiting platforms.

"This project perfectly illustrates our ability to meet ambitious technical challenges within tight deadlines, while bringing our European expertise to serve international scientific excellence," says **Philippe Godefroy, CEO of Bertin Technologies**.

ABOUT BERTIN TECHNOLOGIES

BERTIN TECHNOLOGIES is a European industrial group in high-end instrumentation for critical or scientific applications. Every day, we supply our customers with measurement and observation components, equipment and systems that contribute to the collective effort to achieve industrial sustainability and European sovereignty. We meet the major challenges of our world: Security of People and Nations, Environment Protection and Monitoring, Decarbonized Energy Production Security, Scientific Knowledge Improvement. We address high value-added markets: Defense and Security, Civil Nuclear, Environment, Space and Big Science, Health and Life Sciences... Our 1000 employees share a desire for excellence, in the service of remarkable and innovative technological solutions. Based in Paris Region and Southern France, Bertin Technologies Group has operational subsidiaries in Europe (Germany, Italy, the United Kingdom, Sweden, Finland, Czech Republic, Slovakia) and in the United States and Asia.

www.bertin-technologies.com

CONTACT

Charlotte Riquier – Corporate Communication Director

+33 1 39 30 60 37

charlotte.riquier@bertin.group