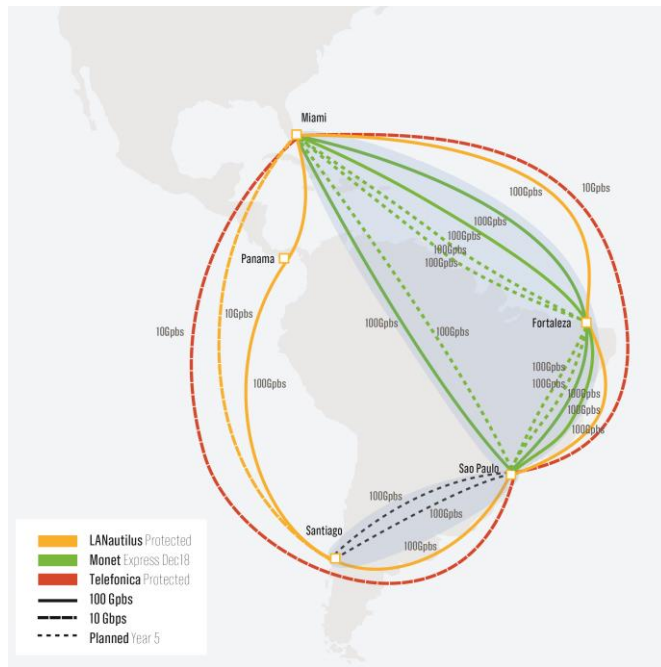


Americas Lightpaths Express and Protect enhances Infrastructure for Research and Education



Americas Lightpaths Express and Protect (AmLight ExP) enables research and education amongst the people of the Americas through the operation of production infrastructure for communication and collaboration between the U.S. and Western Hemisphere science and engineering research and education communities.

AmLight ExP supports a hybrid network strategy that combines optical spectrum (Express) and leased capacity (Protect) that provides a reliable, leading-edge diverse network infrastructure for research and education. AmLight ExP operates high-performance network links connecting Latin America to the U.S., funded by the National Science Foundation ([NSF award](#)

[#OAC-1451018](#)); With significant investments from the Academic Network of São Paulo (ANSP), and Rede Nacional de Ensino e Pesquisa (RNP) and the Association of Universities for Research in Astronomy (AURA), the total bandwidth provided by AmLight ExP between the U.S. and South America is expected to grow to more than 680 Gigabits per second in aggregate capacity between now and 2020 (<http://www.amlight.net/>).

AmLight-ExP will support the LSST and LHC-related use cases in association with high-throughput low latency experiments, and demonstrations of auto-recovery from network events, using its 100G ring network that interconnects the research and education communities in the U.S. and South America. These use cases and demonstrations will highlight AmLight-ExP and its multifaceted roles for networking in support of the collaborative work by many teams in the US and Latin America. In addition, the demonstrations will feature the research and education networks participating in AmLight-ExP, referred to as the AmLight Consortium. The AmLight Consortium is a group of not-for-profit universities, state, national and regional research and education networks including the [AmLight ExP](#) project at [Florida International University](#), [AURA](#), [LSST](#), [RNP](#), [ANSP](#), [Clara](#), [REUNA](#), [FLR](#), [Telecom Italia Sparkle](#), and [Internet2](#). The figure represents the new AmLight-ExP map including new sites operating at 100G.