

**Mercedes Martín-Benito, former PhD student of the IEM, awarded the Bronstein Prize in Loop Quantum Gravity.**

Mercedes Martín-Benito, former PhD student of the IEM, was awarded the Bronstein Prize for postdocs scholars in Loop Quantum Gravity during the Loops 17 Conference, held in Warsaw from the 3<sup>rd</sup> to the 7<sup>th</sup> of July of 2017.

The prize is named for Matvei Petrovich Bronstein, who was the first to emphasize that quantum gravity requires a deep revision of classical space-time concepts. The promising young Ukrainian physicist died in the Stalinist Great Purge in 1938.

The Bronstein Prize was instituted at the [“Loops 11”](#) conference, held in Madrid in 2011. Through this prize, the Loop Quantum Gravity community recognized Mercedes Martín-Benito for “her outstanding contributions to inhomogeneous Loop Quantum Cosmology”.

The Laudation for the 2017 Bronstein Prize explained that “when full quantum analyses in Loop Quantum Cosmology were still focused on homogeneous spacetimes, Mercedes pioneered a new quantization framework capable of dealing with local degrees of freedom. Her study has proven that a rigorous and consistent quantization of gravitational systems with local degrees of freedom can be reached in a way compatible with the physics observed today. Her work clarifies how standard quantum field theory can be recovered from a purely quantum treatment of gravity and matter, and has paved new roads for the consideration of Loop Quantum Gravity effects in the Early Universe and Cosmology”. The Laudation also states that “Mercedes’ career is a proof of the leading role that women have in the Loops scientific community, and an example for young generations in Spain and internationally”.