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The Frequency-Hough project: algorithm optimization and HPC for present and future coninuous gravitational-wave searches

The search for continuous and persistent gravitational waves emitted by isolated and rotating neutron stars is a top priority for current and future ground-based detectors. However, those searches are typically bounded in sensitivity by their high computational costs. In this talk, I will introduce the flagship use case devoted to the Frequency-Hough algorithm, which performs a blind search for unknown sources from any position in the sky. I will show the status of the project at Milestone 9 and the perspectives for the next months.

Giorno preferito

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