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Testing the importance of the AGN channel for stellar binary black hole mergers

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The origin of stellar black hole binary (sBHB) mergers detected by the LIGO/Virgo interferometers is debated. One viable channel is the formation and merger of sBHB in the accretion discs surrounding active supermassive black holes. In this talk, i will review our observational strategy to investigate and assess a spatial correlation between Gravitational Wave detections and Active Galactic Nuclei. I'll then present our results, which pose the first direct and largely model independent constraints on the AGN channel. I will end with a discussion on the implications of our findings.

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