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Using Planck maps for a systematic search of ultra-bright high- z strongly lensed galaxies

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Thanks to its all-sky coverage, the Planck mission had the unique capability of detecting the brightest strongly lensed high- z galaxies in the sky. The combination of boosted luminosity and stretching of images offers a unique opportunity to pierce into their internal structure and dynamics via high-resolution follow-up observations. It becomes possible to reach spatial resolutions of tens of pc and measure feedback-driven molecular outflows. Resolved imaging and kinematics of early galaxies is the most direct and powerful way to learn about the complex physical processes governing galaxy formation and evolution and to discriminate among competing scenarios. In this talk, I will present such a scientific exploitation of Planck maps and the chance of a systematic search of strongly lensed galaxies in those data.

Primary author: BONATO, Matteo (INAF-IRA)

Presenter: BONATO, Matteo (INAF-IRA)

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