The JWST project: Applications to PDRs or shocks

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The James Webb Space Telescope (JWST) should be launched in 2018, with a 6.5meter primary mirror and four imaging and spectroscopic (R=100-3000) instruments working from 0.6 to 28.5 microns. The PCMI community must be prepared to use this unique facility whose access will be open but strongly competitive. First call for Proposals should be issued approximately 1 year before launch.

I will present the expected performances of the instruments. The gain in angular resolution and sensitivity will be at least one order of magnitude compared to previous infrared observatories.With an angular resolution better than 1 arcsec (or 0.002 pc/400 UA for a distance of 400 pc), it will be possible to resolve the spatial scales in nearby galactic objects (photodissociation regions – PDRs, shocks, disks, ...)where key physical processes are acting. Illustrative examples will be presented.