

**SPECIAL
REPORT**

PACIFIC TOTAL SOLAR ECLIPSE BLOWOUT! p. 40

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SNAPSHOT



THE GREEN WEB OF STAR FORMATION

JWST focuses its infrared gaze on bright star-forming regions.

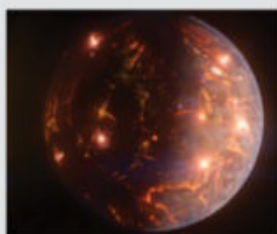
The mossy green, gaseous “vines” that appear here offer a different view of the barred spiral NGC 5068 than you might be used to seeing. This infrared close-up of the galaxy’s central regions highlights structures that play an important role in the development of stars in our universe. The composite photo, taken by the James Webb Space Telescope (JWST), features a galaxy 20 million light-years from Earth in Virgo. Combining data from JWST’s Mid-Infrared Instrument (MIRI) and Near-Infrared Camera (NIRCAM), which can cut through obscuring dust and gas, it shows wispy tendrils of material where star formation is occurring.

The pinpricks of light are older stars scattered throughout the galaxy’s dense center. Near the top left is the bar of NGC 5068, while the red-orange spots littering the image are clumps of new stars. The spots’ glow comes from ionized hydrogen gas energized by these hot,

young suns. The swamp-colored threads throughout are intergalactic dust — fuel for more stars — along the galaxy’s arms. The data from this galaxy and others like it give a glimpse into the process that creates stars throughout the cosmos. Over the past year, JWST has observed nearly 20 galaxies as part of the PHANGS survey, an attempt to obtain the most complete picture yet of how young stars burst to life. —SAMANTHA HILL



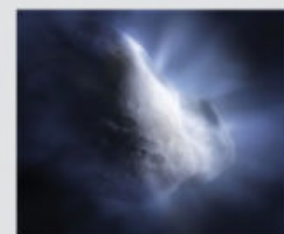
HOT BYTES



LAVA WORLD
Data from NASA’s TESS and retired Spitzer space telescopes suggest that exoplanet LP 791-18 d may be covered in volcanoes. Its interior is likely heated as the planet is pulled and stretched by a neighboring planet.



ISS REPRIEVE
Russia confirmed April 27 that it would support operations on the International Space Station through at least 2028. The nation had threatened to quit in the wake of condemnation of its invasion of Ukraine.



WATER FIND
JWST has detected water vapor around Comet 238P/Read, the first such detection from a comet that resides in the asteroid belt.