

Star birth with a chance of winds?

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Credit: ESA/Hubble & NASA

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Although small and messy, galaxies like NGC 4861 provide astronomers with interesting opportunities for study. Small galaxies have lower gravitational potentials, which simply means that it takes less energy to move stuff about inside them than it does in other galaxies. As a result, moving in, around, and through such a tiny galaxy is quite easy to do, making them far more likely to be filled with streams and outflows of speedy charged particles known as galactic winds, which can flood such galaxies with little effort.

These galactic winds can be powered by the ongoing process of star formation, which involves huge amounts of energy. New stars are springing into life within the bright, colorful 'head' of NGC 4861 and ejecting streams of high-speed particles as they do so, which flood outwards to join the wider galactic wind. While NGC 4861 would be a perfect candidate to study such winds, recent studies did not find any galactic winds in it.

Provided by NASA's Goddard Space Flight Center

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