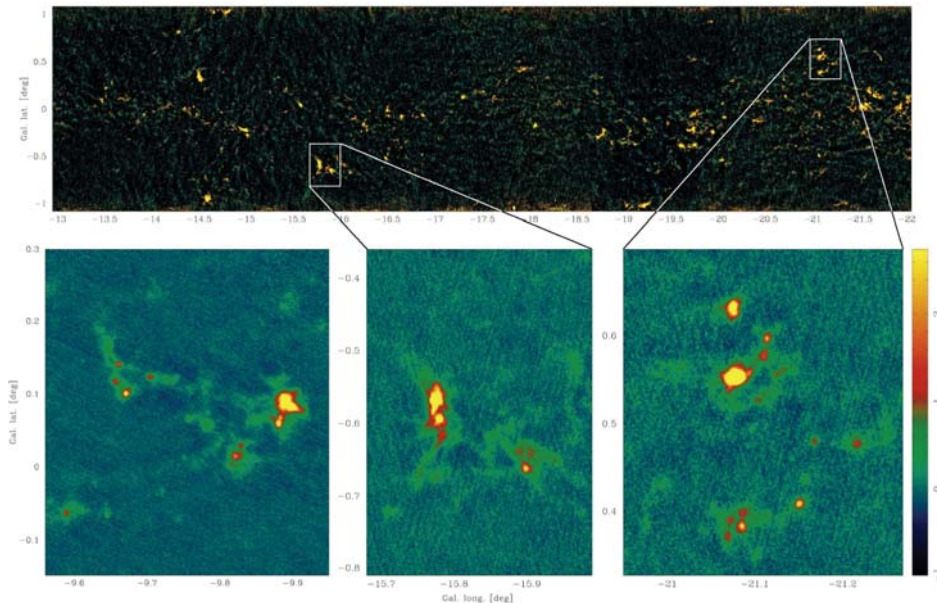




## HIGHLIGHTS: this week in A&A

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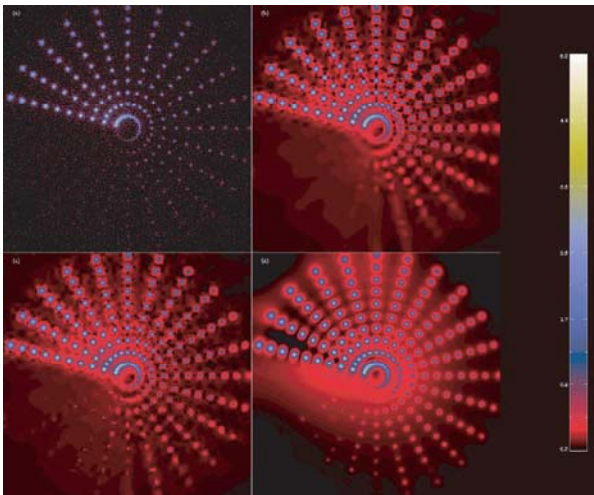
### In section 5. Galactic structure, stellar clusters, and populations

**“ATLASGAL - The APEX telescope large area survey of the galaxy at 870 microns”**, by F. Schuller, K. M. Menten, Y. Contreras, et al., *A&A* 504, p. 415

The APEX telescope and its recently commissioned bolometer LABOCA have been used to begin a survey of the Milky Way at 870 microns (ATLASGAL). This first release reveals  $\sim$ 6000 compact sources, or 63 sources per square degree, as well as extended filaments. The survey highlights young protostellar objects and massive star formation.

### In section 13. Astronomical instrumentation

**“Source detection using a 3D Sparse representation: application to the Fermi gamma-ray space telescope”**, by J.-L. Starck, J.M. Fadili, S. Digel, B. Zhang, and J. Chiang, *A&A* 504, p. 641



Gamma ray telescopes measure both the angular position and the energy of photons, in a regime where point source fluxes are low compared to the diffuse background and where the angular resolution varies tremendously with photon energy. These characteristics make source detection a non-trivial proposition. This paper develops a multivariate data processing procedure that combines transformations meant to render count (Poisson) data approximately normal with wavelet denoising methods, in data-spaces of 2 or more dimensions. The resulting algorithm is very fast compared to traditional likelihood model fitting and permits efficient detection across the time dimension and immediate estimation of spectral properties.