The ATLASGAL survey: a view on the earliest stages of high mass star formation

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The ATLASGAL survey is a sub-millimeter continuum survey of the Galactic Plane with the LABOCA camera at APEX. It offers one of the most sensitive and extensive view of the inner Galaxy at sub-millimeter wavelengths among ground-based surveys. With over 10 000 compact sources identified, it provides an unprecedented view of all stages of massive star formation. I will present recent results from the ATLASGAL survey and its follow-up projects, discuss statistically significant samples of massive star-forming clumps, with a particular focus on the youngest and coldest clumps. These are potential sites of high mass star formation in the earliest stages and many clumps of this particular sample have not been previously known. Extensive high angular-resolution follow-up observations of this sample are currently in preparation with ALMA. Such a Galactic scale sample complemented with spectroscopic follow-up observations is the first step to constrain the initial conditions and the evolutionary sequence of high mass star formation.