

## Structure of cold ISM, YSO clustering and turbulence

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The distribution of galactic cold interstellar medium (ISM) was revealed by a recent multi-wavelength survey using the Planck microwave observatory, and a catalogue of cold ISM clumps was compiled i.e. the Early Cold Core (ECC) catalogue [1,2].

We show that a statistically significant clustering is seen in the distribution as it was proved by Monte-Carlo simulations. Results of our investigations of the point pattern will be presented. We will present methods to describe the cluster structures. The results are compared to the distribution of young stellar objects detected by the AKARI infrared satellite observatory [3,4].

We also address the question if the observed pattern is a result of turbulence in the ISM.

[1] Planck Collaboration, *A&A* 2011, 536, 23.

[2] Planck Collaboration, *A&A*, **2011**, 536, 23

[3] Murakami, H., Baba, H., Barthel, P., et al. *PASJ* **2007**, 59, S369

[4] Yamamura, I., Makiuti, S., Ikeda, et al. *yCat*, **2010**, 2298,0Y