Observing Dust and polarization with ALMA

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Résumé

I will summarize the latest findings regarding galactic and extragalactic dust with Planck and Herschel, including the dust optical properties in the submm and the study of cold cores. I will also describe the latest observations of all-sky dust polarization with Planck, and what they may be revealing about the dust properties and the geometry of the galactic magnetic field in our galaxy. I will discuss some of the questions raised by these new results, and will highlight a few of the research axis that will certainly benefit from further detailed studies with ground interferometer in general, and ALMA in particular.

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