Properties of the turbulent, magnetized interstellar medium

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Abstract

Turbulence is ubiquitous in all phases of the interstellar medium, from the densest star-forming clouds to the diffuse gaseous halo. It plays a role in many physical processes such as star formation, gas heating, energy redistribution, amplification of magnetic fields, and, most importantly for this meeting, in acceleration and propagation of cosmic rays. With emphasis on cosmic rays in mind, I will focus on magnetized turbulence in the diffuse (neutral and ionized) gas of which most of the Galactic ISM consists.

In this talk, I will try to give an overview of the current knowledge of turbulence in the diffuse, magnetized interstellar gas, which will be mostly observationally focused.

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