

---

# Turbulence in the interstellar medium. Prospects with the SKA.

François Levrier\*<sup>1</sup>

<sup>1</sup>Laboratoire de Radio Astronomie de l'ENS (LRA) – CNRS : FRE2460, Observatoire de Paris – France

## Résumé

Magnetized turbulence is now recognized as a major player in the dynamics and evolution of the interstellar medium. Power-law power spectra are a signature of a turbulent cascade of kinetic energy from the large injection scales to dissipation scales. Yet, the latter are not well constrained : Current observations provide kinematical and chemical clues of this dissipation occurring at the milliparsec scale, in structures which may be vortices or low-velocity shocks. On the other hand, Herschel observations have uncovered a typical width (0.1 pc) of self-gravitating filaments, a size which may be connected to the dissipation of energy via ion-neutral friction (ambipolar diffusion). I will present some of the questions pertaining to the dissipation of interstellar turbulence and how the SKA may help us answer them.

---

\*Intervenant