

Galactic synchrotron emission with Gaussian random magnetic field realisation

Sunday, 8 September 2019 15:00 (20 minutes)

I would like to present my numerical work in simulating the Galactic synchrotron emission, with the `hammurabiX` package, where we have proposed fast generators for realizing the Galactic magnetic turbulence with physical motivations and modelings.

We find out the synchrotron B/E ratio is related to both the spatial and spectral structure of the magnetic turbulence.

In addition, I would also like to share our work in the IMAGINE consortium towards inferring the Galactic components with Bayesian analysis, and our idea of the consistent numerical approach to simulating the Galactic emissions.

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