Chris Hales (NRAO Socorro)

A New Probe of Magnetic Fields in the Cosmic Web

Establishing the properties of magnetic fields on scales larger than galaxy clusters is critical for resolving the unknown origin and evolution of galactic and cluster magnetism. However, firm observational evidence for magnetic fields in large scale structure remains elusive. In this talk I will outline a new theoretical formalism for probing magnetic fields in the cosmic web, built upon Information Field Theory. I will describe plans for observation with the ultra-deep JVLA CHILES Con Pol survey.