

## **Seminar**

### **Challenges to understanding Cosmic Magnetism**

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The universe is magnetised, from stars like the Sun, to the large-scale coherent magnetic fields detected in galaxies and galaxy clusters. Recent observational evidence suggests that even the intergalactic medium in voids could host a very weak magnetic field, coherent on Mpc scales. The standard picture for the origin of fields in all astrophysical systems involves turbulent dynamo amplification of a weak seed magnetic field. In such dynamos the kinetic energy of motions get converted to magnetic energy. We review the basic idea behind turbulent dynamos and the main challenges they encounter. While it is relatively easy for magnetic energy to grow, explaining the observed degree of spatio-temporal coherence of cosmic magnetic fields remains intriguing.

***Tuesday, Mar 1<sup>st</sup> 2016***

***4:00 PM (Tea/Coffee at 3:45 PM)***

***Seminar Hall, TCIS***