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Statistical Properties of Magnetic Fields in Galaxies CAMERON VAN ECK, JO-ANNE BROWN, University of Calgary, ANDREW FLETCHER, ANVAR SHUKUROV, Newcastle University — Observations of magnetic fields in galaxies, including our own, provide critical constraints in modeling the origin and evolution of these magnetic fields, and how the fields are influenced by their physical environment. As a consequence of improved observational techniques, the number of galaxies with identifiable features and characteristics has increased significantly in recent years. There is now sufficient data to begin looking at statistical properties of galactic magnetic fields. In this talk, we present the results of correlation studies examining the relationship between both regular and random magnetic fields and other physical properties of galaxies, such as gas density and star formation rate.

Cameron Van Eck University of Calgary

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