**Abstract:**

This talk is about a model for topological defects  in planar  ferromagnetic materials,  and the geometrical techniques which can be used to obtain infinitely many exact static solutions. The defects, called magnetic skyrmions in this context,  are widely studied in physics because of their potential role in future magnetic information storage. The applicability of techniques from complex geometry and  gauge theory is surprising, and leads to interesting links with the theory of gravitational lensing. Finally, the dynamics of magnetic skyrmions in response to an applied current, which is of  practical interest, also contains unexpected geometry and can be understood in terms of  quaternionic Moebius transformations.