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Sommario/riassunto

Magnetism is one of the most pervasive features of the Universe, with planets, stars and entire galaxies all having associated magnetic fields. All of these fields are generated by the motion of electrically conducting fluids, the so-called dynamo effect. The precise details of what drives the motion, and indeed what the fluid consists of, differ widely though. In this work the authors draw upon their expertise in geophysical and astrophysical MHD to explore some of these phenomena, and describe the similarities and differences between different magnetized objects. They also explain why magn