THE SUN AS A LABORATORY FOR PLASMA PHYSICS

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Several phenomena connected with the magnetic field of the Sun – the cool sunspots, the hot corona, solar flares, the solar wind – are collectively known as solar activity. This paper discusses how one uses the MHD equations to understand how the magnetic field of the Sun is produced by the dynamo process and then gives rise to these diverse activities, making the Sun the best laboratory for plasma physics in the limit of high magnetic Reynolds number (defined at the end of the Introduction).