

# NEW INSIGHTS ON THE ORIGIN OF MAGNETIC FIELDS IN WHITE DWARFS AND NEUTRON STARS

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Main sequence, white dwarf and neutron stars are observed to exhibit a wide range of magnetic fluxes with a maximum that appears to be remarkably insensitive to the type of star. We discuss these observations in the context of the fossil and dynamo hypotheses for the origin of magnetic fields in stars, and discuss the role played by mergers in the amplification of magnetic fields. We propose that the magnetic fields of the high field and low field magnetic white dwarfs are likely to have different origins and discuss possible scenarios that may explain current observations.