## EP7 Modelling of externally influenced magnetic fields in stars

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Magnetic fields are commonly attributed as a property to a star itself. Thus, the magnetic field is assumed to be generated in the star's interior, from which it penetrates the photosphere outward. The possibility, that the field comes from outside the star, has not been considered hitherto. However, the striking observation of a strong magnetic field of +2000 G in the supergiant  $\nu$  Cep (HD 207260, A2Ia), which cannot possess or retain an own magnetic field because of field-destroying processes like convection, could not be arranged reasonably and led to the assumption, that we observe at this star the influenced external magnetic field of a companion in a close binary system.

The constellation of a magnetically interacting binary system is worth investigating for its own. An important example is given also by cataclysmic systems with a magnetic white dwarf, which influences with its field the chromosphere of the main star, where the information on the magnetic field is coming from. Calculations of the model of a bright main star and a tiny neighboring component with a huge magnetic moment are carried out and demonstrated graphically on the base of the *Magnetic Charge Distribution*, which allows the location of magnetic field sources outside the main star on an orbital position of the companion.

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