Thermal radiation from magnetic neutron star surfaces

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In this talk, after discussing the observational status of thermal radiation from isolated neutron stars (NSs), we focus on the role that intense magnetic fields can play in the thermal emission of magnetic NS surfaces, presenting results of the thermal spectra obtained by using different surface temperature distributions. We also discuss the effect of the non-isotropic thermal conductivity, due to the presence of intense magnetic fields, on the surface temperature distribution in order to obtain self-consistent models.