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## Magnetic field dependence of light baryon properties in a Skyrme model

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The properties of nucleons and  $\Delta$  isobars in a uniform magnetic field are investigated. In the weak magnetic field region, the general relations between magnetic moment of nucleons and  $\Delta$  isobars are given. The estimation shows in the core part of the magnetar, the equation of state for nucleons and  $\Delta$  isobars depends on the magnetic field, which affects the mass limit of the magnetar.

**Primary author:** HE, bingran (Nanjing Normal University)

**Presenter:** HE, bingran (Nanjing Normal University)

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