

## Latest results from HypHI

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A hypernucleus, a nuclear bound system with strangeness, has been studied almost for six decades to obtain comprehensive understanding on the baryon-baryon interaction under the flavoured-SU(3) symmetry. Hypernuclei have been so far studied mainly by induced reactions of primary electron and secondary meson beams on the stable target materials. In these methods, an excellent resolution to look into details of the hypernuclear structure has been achieved, however, hypernuclei with extreme isospin and hypernuclei magnetic moments as well as exotic strangeness clusters can not be studied. Contrary, heavy ion induced reactions with the fixed target materials at the GSI SIS energies can open opportunities to study these subjects albeit the identification of them could be tough because of a large particle multiplicity. The HypHI project aims to perform the precise hypernuclear spectroscopy with stable heavy ion beams and rare isotope beams at GSI and towards the FAIR. The first HypHI experiment was already performed in 2009 at GSI, and the first results on Lambda Hyperons and hydrogen Lambda hypernuclei as well as the evidence for neutral strange two-body nuclei will be discussed.

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