

## Possibility of light neutral hypernuclei with strangeness -1 and -2

*Wednesday, 14 May 2014 10:00 (30 minutes)*

Our current knowledge of the baryon–baryon interaction suggests that the dineutron ( $n,n$ ) and its strange analogue ( $\Lambda,n$ ) are unstable. In contrast, the situation is more favourable for the strange three-body system ( $n,n,\Lambda$ ), and even better for the four-body system  $T=(n,n,\Lambda,\Lambda)$  with strangeness -2, which is more likely to be stable under spontaneous dissociation. This new nucleus could be produced and identified in central deuteron–deuteron collisions via reaction  $d+d \rightarrow T+K+K$ .

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**Session Classification:** Part 1