

Abstract for an Invited Paper  
for the HAW09 Meeting of  
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**Light hypernuclei and hyperon-nucleon potentials based on lattice QCD**

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We will provide an overview of recent theoretical studies on light hypernuclei and lattice QCD hyperon-nucleon potentials. Results of ab initio calculations of s-shell hypernuclei are outlined, revealing the importance of coupled-channel such as  $\Lambda N - \Sigma N$ . The challenge to obtain the lattice QCD potentials will also be presented.