Title:
Experimental Overview and Challenge in Strangeness Nuclear Physics

Ken'ichi Imai (Kyoto University)

Abstract:
A big progress has been made in strangeness nuclear physics in the past decade. Examples are; 1) The "hyperfine" splitting of hypernuclei were measured with the Hyperball and ΛN spin dependent interactions were determined. 2) The "complete measurements" of the weak decay of hypernuclei were made and the np ratio puzzle in the non-mesonic decay was solved. 3) The discovery of a clean event of "Lamdpha " and determination of its binding energy concluded that the ΛΛ interaction is weak attractive. However, we still have important questions to be answered in this field, especially in relation with QCD and nuclear physics. For the current and future strangeness nuclear physics, fortunately, we have and will have facilities such as JLab, SPring8, Daphne, J-PARC, FAIR,,. I will discuss possible experimental challenge in the next decade in the strangeness nuclear physics and related field.