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Dibaryons with S=-1 in the bound kaon approach to the Skyrme model TETSUO NISHIKAWA, Dept. of Phys., Tokyo Institute of Technology, YOSHIHIKO KONDO, Kokugakuin University — Dibaryons with strangeness=-1 are studied in the framework of the bound kaon approach to the Skyrme-soliton model. We explore the possibility of kaon bound states in a SU(2) Skyrmion background field with B=2, where B denotes the baryon number. The kaon binding energy and the total energy are calculated in kaon-nucleon-nucleon channels. We particularly study the ppK^- system, which was predicted to exist as a deeply bound kaonic nucleus by Akaishi and Yamazaki. We will also study the dependence of the kaon binding energy on the distance between the two Skyrmions, and the baryon number density distribution.

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