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**Formation of heavy electron bands by ordering in two-channel Kondo lattice** SHINTARO HOSHINO, Tohoku university, JUNYA OTSUKI, YOSHIO KURAMOTO — Itinerant and localized characters of electrons are one of the most fundamental problems in condensed matter physics. In typical Kondo lattice systems, the f electrons are localized in the high temperature region, and acquire the itinerancy by the interaction between f and conduction electrons with decreasing temperature. In the present work, however, we show that the localized character of f electrons changes into itinerant one at the transition point in two-channel Kondo lattice systems. We have analyzed the system using the dynamical mean-field theory combined with the continuous-time quantum Monte Carlo method. With one conduction electron per site, which corresponds to the quarter filling of each band, a channel order emerges in wide parameter region with metal-insulator transition. At the same time, the heavy electron bands are formed, which indicates the itinerant f-electron states. Since f electrons acquire the itinerancy only below the transition temperature, this behavior can be regarded as itinerant-localized transition of electronic states. We will discuss these behaviors through temperature dependence of the single-particle spectrum.

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