

Title: „Heavy Weyl fermion state in CeRu<sub>4</sub>Sn<sub>6</sub>“

A new type of topological state in strongly correlated condensed matter systems, heavy Weyl fermion state, has been found in a heavy fermion material CeRu<sub>4</sub>Sn<sub>6</sub>, which has no inversion symmetry. Both two different types of Weyl points, type I and II, can be found in the quasi-particle band structure obtained by the LDA+Gutzwiller calculations, which can treat the strong correlation effects among the f-electrons from Cerium atoms. The surface calculations indicate that the topologically protected Fermi arc states exist on the (010) but not on the (001) surfaces.