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Anomalous Hall Resistance jump at Lebed's magic angles KAYA KOBAYASHI, Aoyama Gakuin University, TAICHI TERASHIMA, SHINYA UJI, NIMS, JUN'ICHI YAMADA, University of Hyogo, TOSHIYUKI MITSUI, Aoyama Gakuin University — We performed a series of electrical transport measurements focusing on the transverse response (the Hall effect) far from the Field-Induced Spin Density Wave (FISDW) region, and found anomalous enhancement at certain angles. The signal behavior bares similarity to that observed in Nernst effect measurements, though the magnetic field strength and angular region are different. This similarity suggests that the two effects originate from the same mechanism dominated by conduction locked in the plane of the magnetic field at magic angles. We report detailed transport measurements and discuss the conduction mechanism in the vicinity of Lebed's magic angles.

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