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Nonlocal resistance in a bilayer graphene under a magnetic field[1] CHANG-RAN WANG, TSUNG-YEH YANG, CHIA-TSO HSIEH, YUNG-YU CHIEN, WEI-LI LEE, Institute of Physics, Academia Sinica — We have performed nonlocal resistance measurement in bilayer graphene with Hall-bar geometry under high magnetic fields. We observed large nonlocal resistance near the charge neutral point (CNP) which grows rapidly with field intensity. At 15 Tesla, the relative increase of nonlocal resistance near CNP is an order of magnitude larger than the local resistance at the same condition. This behavior is similar to the recent nonlocal measurement result in a single layer graphene. The detailed field and temperature dependences will be presented.

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