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Transport of Nambu-Goldstone modes in a fermionic superfluid point contact SHUN UCHINO, Waseda Univ — In fermionic superfluids, Nambu-Goldstone (NG) modes emerge as a result of spontaneous symmetry breaking. Here, we discuss DC transport of such NG modes through a quantum point contact. We show that contrary to a naive view that enhancement of the phase stiffness may suppress transport of the NG modes, there must be an anomalous contribution that survives at low temperature. We discuss that the anomalous contribution is enhanced in the good-contact limit and strong interaction.

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