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Phase diagrams and transport signatures of Luttinger liquid -Majorana Kramers pair junction.<sup>1</sup> ERIKAS GAIDAMAUSKAS, Niels Bohr Institute, University of Copenhagen, DONG E. LIU, Microsoft Research Station Q, YOUNGHYUN KIM, UC Santa Barbara, JENS PAASKE, KARSTEN FLENS-BERG, Niels Bohr Institute, University of Copenhagen, ROMAN M. LUTCHYN, Microsoft Research Station Q — Majorana Kramers pairs appearing at the ends of a time reversal invariant topological superconductor lead to a quantized conductance of  $4e^2/h$  due to perfect Andreev reflection. We study the stability of Andreev reflection fixed point with respect to electron-electron interactions present in the nanowire and calculate the phase diagram for the system. We find that the low energy properties are determined by local or crossed Andreev reflection fixed points. We analyze transport properties of the junction at these fixed points.

<sup>1</sup>Phase diagrams and transport signatures of Luttinger liquid - Majorana Kramers pair junction

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