Kramers pair of Majoranas in contact with a Luttinger Liquid

DMITRY PIKULIN, University of British Columbia, YASHAR KOMIJANI, University of British Columbia and Rutgers University, IAN AFFLECK, University of British Columbia — I will discuss the signatures of the Kramers pair of Majorana coupled to a quantum wire. I will start from the non-interacting case, showing perfect Andreev process at zero energy — either intrachannel, or interchannel. I will show that turning on the interactions will make one of the Andreev process stable, and another unstable. I will discuss the stability diagram of the fixed points as a function of interactions strength and show that strong enough interactions lead to a non-trivial fixed point.