

# EFFECTS OF INTERFACE SPIN-ORBIT COUPLING ON TUNNELLING BETWEEN NORMAL METAL AND CHIRAL P-WAVE SUPERCONDUCTOR

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**W**e consider a two dimensional electron gas/p-wave superconductor ballistic junction and study the conductance in presence of Rashba spin-orbit coupling both at the interface and in the normal. Solving Bogoliubov-de Gennes equation and using Blonder-Tinkham-Klapwijk formalism, we obtain transmission and reflection coefficients and hence calculate the conductance in terms of RSOC and the height of barrier. Results show that the conductance peaks are shifted to a nonzero bias by interface RSOC. We also show that the RSOC of the normal cannot change the location of the conductance peaks.

## Biography

Ghamar Hassanloo is pursuing her Master's in condensed matter physics. She received BS and MS in Physics from Zanjan University. She is serving as a teacher now.

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