Two-dimensional zero-temperature superconductivity in the presence of charged gluons

Yusuke Yonekura, Takahiro Ohuchi, Yuta Hayashi, M. A. Sadik-Moghaddam

Abstract

We study the zero-temperature zero-temperature superconductivity of two-dimensional matter in the presence of charged gluons. We analyze the charge-pumping effect of the gluons to determine the number of charged gluons, while calculating the capacitance of the gluons. We find that the charge-pumping effect of the gluons has a negative effect on the number of gluons in the zero-temperature zero-temperature superconductivity. We also find the physical consequence of the zero-temperature zero-temperature superconductivity. We find that there are two types of zero-temperature zero-