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Resistivity for Ru oxides on the basis of a conserving approximation NAOYA ARAKAWA, Department of Physics, The University of Tokyo — In order to analyze the origin of the non-Fermi liquid behavior in resistivity for Ru oxides, I analyzed the temperature dependence of resistivity, formulated on the basis of a conserving approximation, for the Ru t_{2g} orbital Hubbard model on a 2D square lattice. In this analysis, I focus on the cases of $Ca_{2-x}Sr_xRuO_4$ with $x =$ 2 and 0.5, and take account of effects of electron correlation by the fluctuation-exchange approximation. In this presentation, I present the results about the effects of not only the self-energy of electrons and but also the Maki-Thompson-type and the Aslamasov-Larkin-type vertex corrections on the temperature dependence of resistivity.

Naoya Arakawa
Department of Physics, The University of Tokyo

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