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Quantum Fluctuation of a Mesoscopic Inductance Coupling Circuit at Finite Temperature

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Abstract: We study the quantization of mesoscopic inductance coupling circuit and discuss its time evolution. By means of the thermal field dynamics theory we study the quantum fluctuation of the system at finite temperature.

PACS: 42.50.Dv, 03.65.-w Key words: mesoscopic inductance coupling circuit, quantum fluctuation, Joule heat effects

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