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## Stability of the normal state of superconductors in the presence of electric currents

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### **Abstract**

The stability of the normal state of superconductors in the presence of electric currents is analyzed within the framework of the time-dependent Ginzburg–Landau equations. We consider the large domain limit. Among other things we show that the stability picture obtained in the one-dimensional case by Physicists in the early 80’s is preserved in this limit for general three-dimensional sample geometry and boundary conditions.