

Specific Resistivity as a Function of Temperature

Here is a plot of the specific resistivity vs. temperature for some metals.

- The resistivity seems to go to **0** for **0 K**. This is not really true, cf. the [detailed curve for Na](#).
- Still, simple free electron theory predicts zero resistance at **0 K**, and trying to see if that is true was one of the driving forces behind the discovery of superconductivity by **Kammerlingh Onnes** in **1911**.

Illustration

