

Quantum Information with Solid-State Devices

VO 141.A55

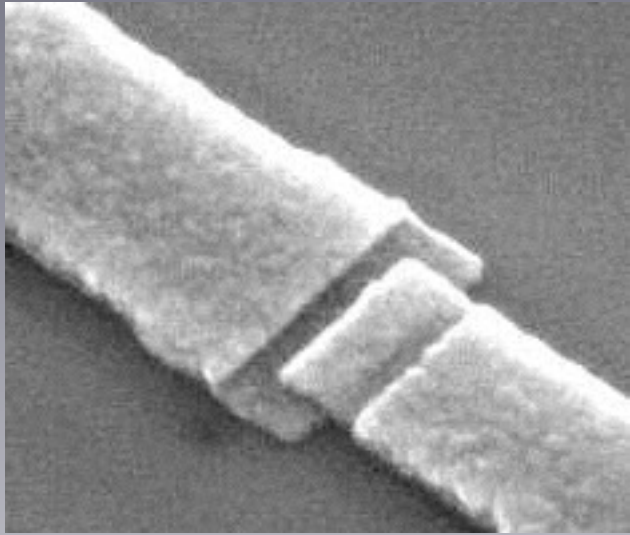
SS2016

Dr. Johannes Majer

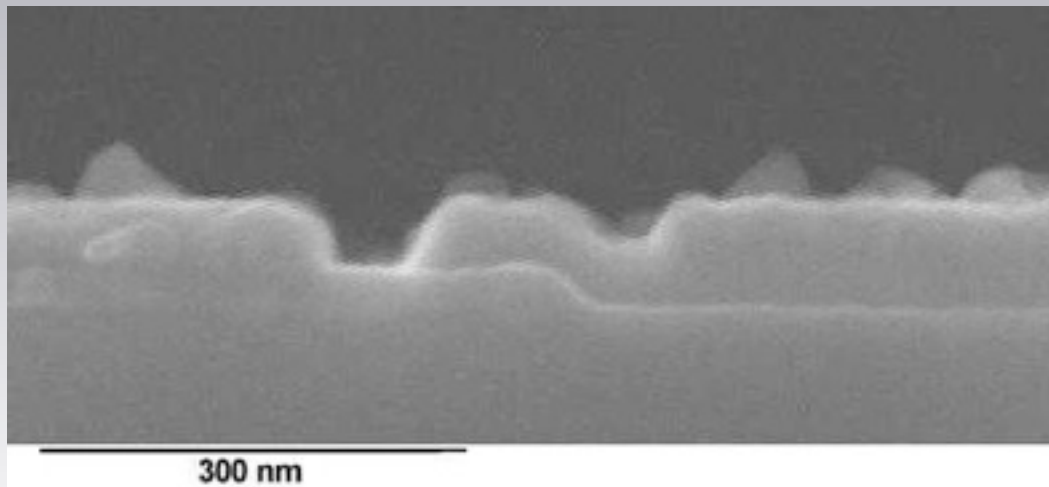
Lecture 6



Josephson junction

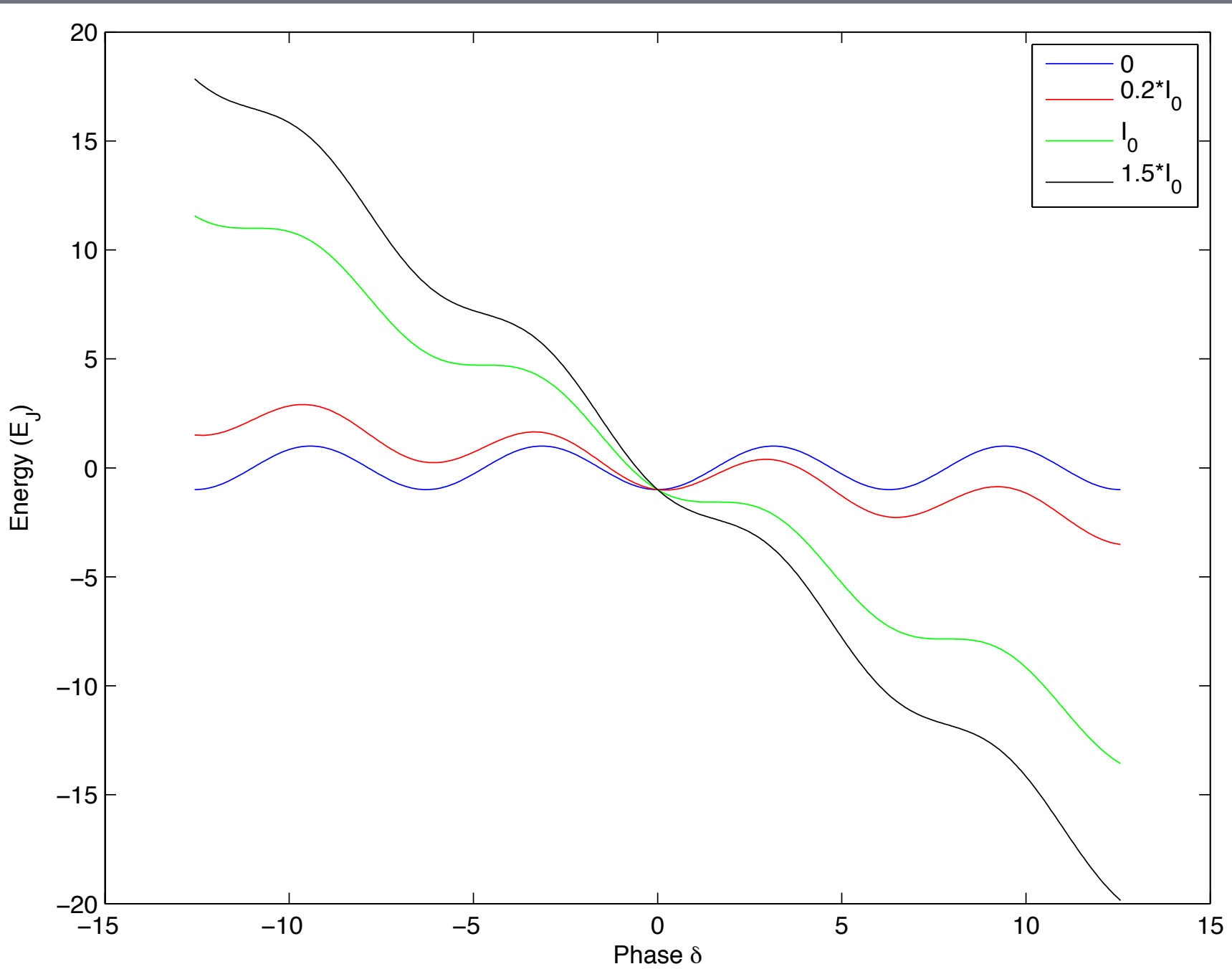


$$I = I_0 \sin(\delta)$$



$$V = \frac{\phi_0}{2\pi} \dot{\delta} = \frac{\hbar}{2e} \dot{\delta}$$

tilted washboard potential



Literature

Introduction to Solid State Physics,
C. Kittel, Wiley John + Sons,
ISBN: 978-0471415268

Introduction to Superconductivity
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ISBN: 978-0486435039

Foundations of Applied Superconductivity
T. P. Orlando K. A. Delin, Addison Wesley
ISBN: 978-0201183238