Physics 152B–Solid State Physics
Syllabus

Instructor:  Massimiliano Di Ventra
Office:  4631 Mayer Hall
Phone:  +1-(858) 822-6447
E-mail:  diventra@physics.ucsd.edu
Office hours:  by appointment

Recommended Texts: Kittel, Introduction to Solid State Physics, 6th Edition

Prerequisites:  152A.

Lectures:  Tu/Th 11 -12:20 in YORK 4060A

Grading:  There will be a Final (which will count 70% of the total grade). Approximately one homework per week will be assigned and solutions will be provided. The homeworks will be graded and will count 30% of the total grade.

List of Topics:  Plasmons, Polaritons and Polarons (Chapter 10)
Optical processes and excitons (Chapter 11)
Superconductivity (Chapter 12)
Dielectrics and Ferroelectrics (Chapter 13)
Diamagnetism and Paramagnetism (Chapter 14)
Ferromagnetism (Chapter 15)