



**MATERIALS SCIENCE
& ENGINEERING**
TEXAS A&M UNIVERSITY

Introduction to Materials Science & Engineering

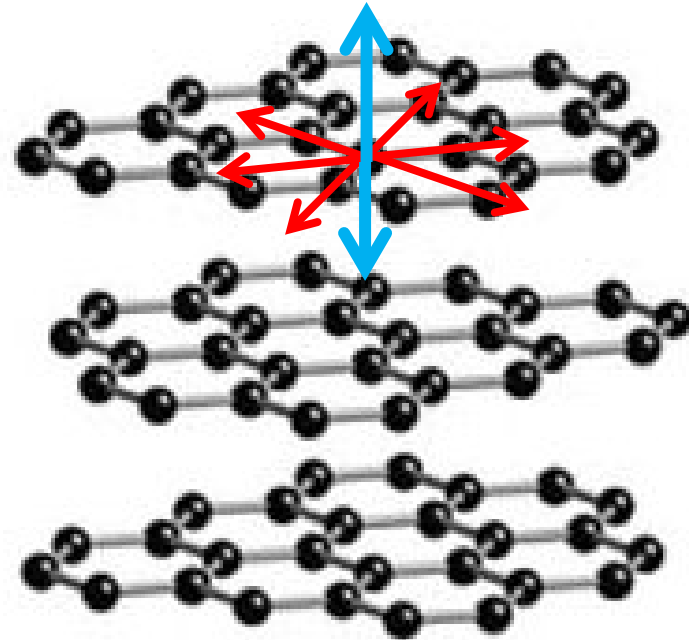
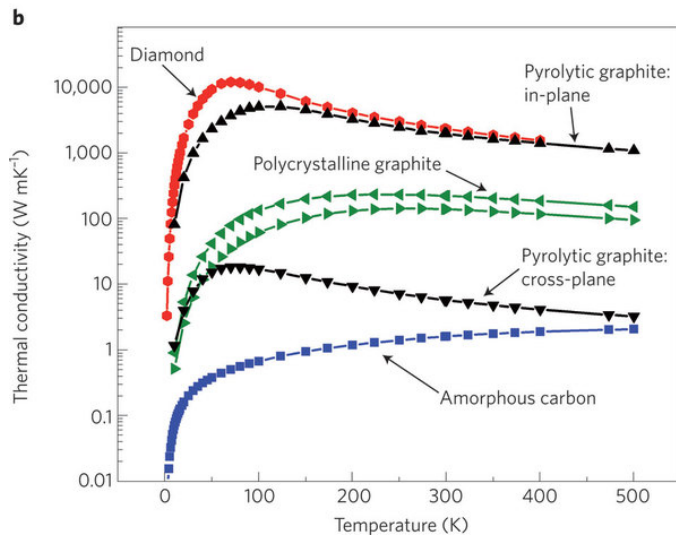
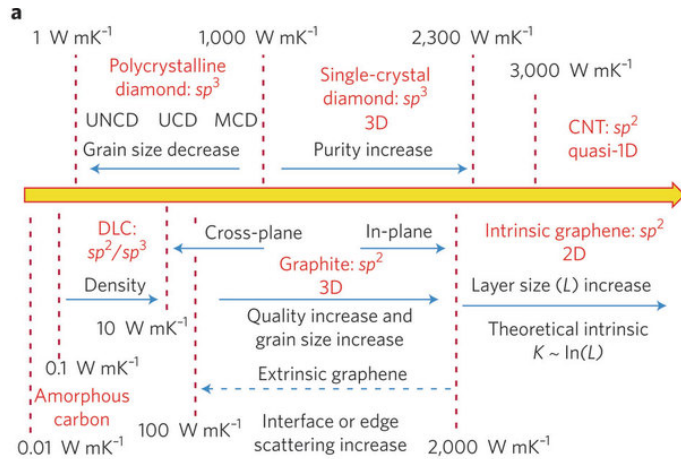
Families of Directions

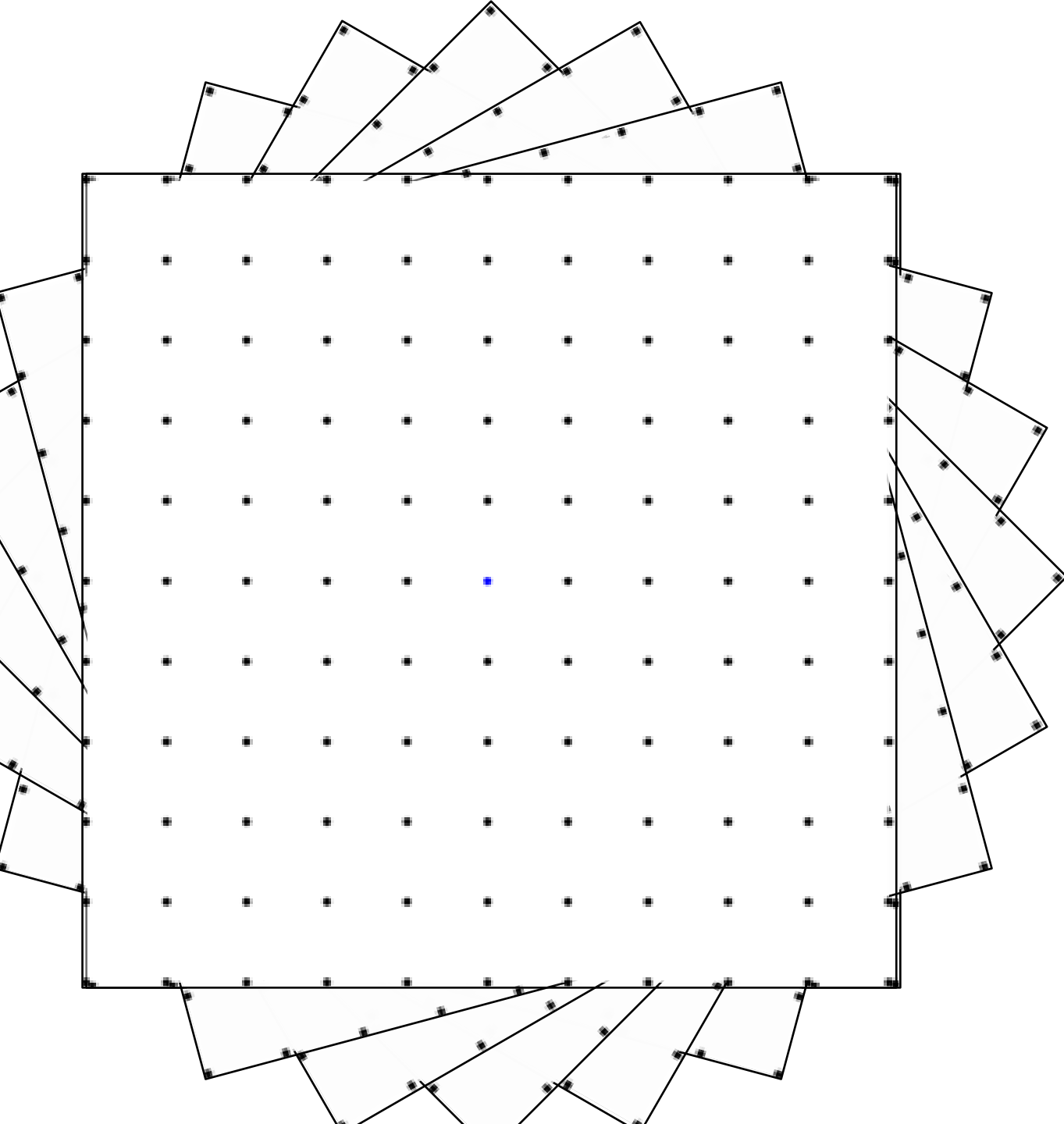
Dr. Patrick Shamberger

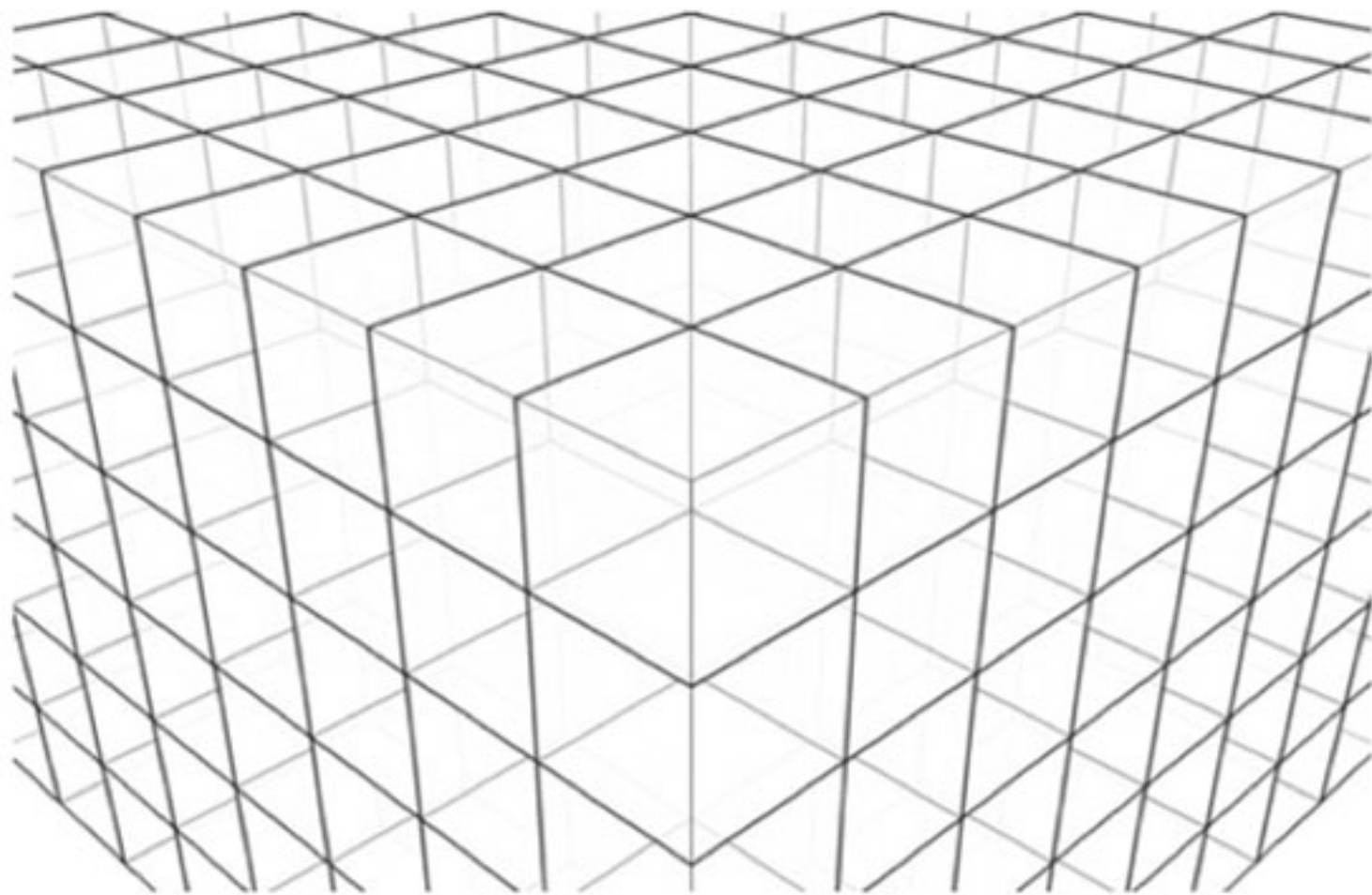
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Families of Directions/Planes







Summary

- Families of directions/planes
- Notation:
 - (111) vs. $\{111\}$
 - $[100]$ vs $\langle 100 \rangle$
- Symmetry of properties follows symmetry of lattice