

Pick between 3 and 5 systems where there is a compositionally controlled insulator-to-metal transition, and make plots of the conductivity as a function of filling.

- Look for distinct systems: InSb, $\text{In}_2\text{O}_3\text{:Sn}$, $\text{SnO}_2\text{:Sb}$, $\text{SrTiO}_3\text{:Nb}$, $\text{VO}_2\text{:Cr}$...
- Try to see whether you can fit a scaling law of the kind:

$$\sigma = \sigma_0 (n - n_c)^\nu$$

- Can the data that you have collected be scaled on to a single plot, for example, of

$$\sigma/\sigma_0 \text{ vs. } n/n_c$$

- If you can, plot room- T data and low- T data separately. Do they display similar scaling?
- Note down the references.