Giving a Technical Presentation

- What is the purpose?
- How best to present?
- What are key ideas?
- How do they relate to each other?
- Basic guidelines
What is the Purpose?

- Usually, it not just a placeholder, e.g.
  - Demonstrate your understanding of material
  - Explain it to others
  - Propose some idea/project/vantage

Convince your listeners and bring them to understand

- Always keep this in mind: design your discussion so this is always integral to what you write
How best to present?

- What is the role of different techniques
  - Visual aides (transitions, animations…)
  - Plots are key:
    - what do they mean? Describe them
    - Make concepts graphical
  - Textual discussion important: don’t do paragraphs
  - If mathematical expressions: How do you get information about them across?

- Consider the arrangement of the information
What are the key ideas?

- Break the topic(s) down
- How do ideas relate to one another?
  - The order and arrangement of material is critical
  - Example: how discuss Uncertainty principle?

<table>
<thead>
<tr>
<th>Blackbody spectrum</th>
<th>Wave packets</th>
<th>de Broglie waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>$E = h\nu$</td>
<td>$\Delta k \Delta x = 1/2$</td>
<td>$p = \hbar k$</td>
</tr>
</tbody>
</table>

- You need to define concepts, parameter ahead of time
- What are these items for a given topic?
Some guidelines for Good Presentations

- Well-defined slides: adhere to previous questions
- Not too much on a slide
  - We can only absorb ~6 items per slide
  - Not an exact science: use your judgement
- Proper dwell time per slide
  - Usually 1-2 minutes per slide about right
    - Never less: then you’re just flipping
    - Can be longer if need to extemporize a bit
- Clear title, outline of points