1. **Introduction**

Instead of a full introduction with blanks, you will use an outline to write your introduction for this lab. You will write all other sections of the report independently.

* Neutral hydrogen
  + How much is there?
  + Where is it?
  + Why is it important to astronomers?
* The 21 cm line
  + What is spin?
  + How does spin create an emission in neutral hydrogen (HI)?
  + Characteristics of this emission line
  + Importance of this line
* Rotation curves
  + What is it (what does it plot?)
  + What does it show/imply
  + What it can be used to determine
  + How you’ll be making one in this lab (briefly)