

1. Introduction
 - a. quick introduction to state-of-the-art and need/applications for this tool
 - b. overview of specific references (loss models and turbine design tools)
 - c. list of objectives
2. Methodology (can switch order of 2.a and 2.b ?)
 - a. Design tool methodology
 - i. Overview and applications
 - ii. Thermodynamics
 1. References
 2. Assumptions
 3. Isentropic equations for turbine flow
 - iii. Loss models
 1. References
 2. Kacker and Okapuu
 3. Craig and Cox
 4. ...
 - iv. Software and code
 1. Implementation of tool (python)
 2. Libraries and optimization functions
 3. Front-end view and interface (if I have time for that)
 - b. TFG workflow methodology
 - i. Initial turbine model
 - ii. Introduction of loss models
 - iii. Optimization
 - iv. Comparison to test cases
3. Turbine model
 - a. Overview
 - i. Inputs and assumptions (mi idea es que la herramienta tenga unos inputs obligatorios (temperatura de entrada, ΔH , etc.) y la lista de *assumptions* que se pueden modificar sólo si el usuario lo desea—al contrario, se utilizaría el valor *default*)
 - ii. Notation and geometry
 - iii. Outputs: tables, figures
 - b. Model description
 - i. Outlet Mach optimization
 - ii. Rotor angles optimization
4. Integration of loss models
 - a. For each: define equations (as referenced in 2.a.iii), show where they are included into the turbine model
5. Optimization
6. Results, comparatives with test cases
7. Conclusion