BVP Paper

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WOW this is a really long sentence check out this abstract I'll just keep writing words to make this at least one line long so we know what the formatting looks like, ok?

I. INTRODUCTION

Here we introduce why the timescale problem is hard, and how the choice of initial conditions vastly effects the amount of time it takes for a solution to get to a meaningful solution

II. EXPERIMENT

Here we talk about how to set up the RB problem that we're going to solve, and exactly what we're going to compare (how long the run is going to go from base and from bvp, how much time we're going to compare over after that, etc.) We need to compare over a short enough timescale that the effects of BVPs don't get washed away, and we also need to compare over long enough timescales that we get the rare events we expect. This is where we put a figure showing the time evolution of energy in IVP / BVP side-by-side.

III. RESULTS & DISCUSSION

Here we talk about how the solutions are different, or similar. This includes:

1. Showing that the flow fields look similar
2. Showing how the temperature / flux profiles look similar/different
3. showing how Nu and Re scale with Ra in BVP / IVP.
4. showing how the PDFs of w, wT, and T change.

Then we need to make some comments about whether this is good or bad
Then we need to mention how the same thing can be done in stratified, just there you don't assume symmetrical boundary layers.

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Appendix A: Process for setting enthalpy flux