

## What I have done:

- Copied the MATLAB code as closely as possible, so that the two versions can be easily compared
- Made as few changes as possible to comments in the code
- Made the plots and the keyboard input as similar as possible to the MATLAB versions, so the two can be easily compared
- Run a series of tests, the apparent success of which give me a reasonable degree of confidence that the code works as it should
- In the RobinsonCode.py file, I have put some comments to indicate which point of the MATLAB version a line corresponds to. This is because I have had to add some lines of code in the Python file which makes the two versions go out of sync

## What I have not done:

- The quorum stuff - I have not converted or implemented any of this at all
- Copied all of the scripts, such as the 4-nest example
- Saved all variables to some Python format file at the end of the example script - Python doesn't have this as a built in feature in the same way that MATLAB does - if I wanted to do something like this I would probably install and use the "shelve" module, or something like it, but the resulting file would be no more native to Python than the Excel file is
- Run the kind of exhaustive tests of the code which I normally would if I had programmed this from scratch. I have copied tried and tested code quite closely, and have already fixed a number of bugs resulting from the code conversion process, so I'm hoping the Python version is good now. If not, please let me know!

## Things to know:

- MATLAB is atypical among programming languages in the way it indexes into data structures like matrices. In MATLAB, indices begin at 1, whereas in Python, and many other languages, indices for lists, arrays etc. begin at 0. This has resulted in a number of small changes in the code, and also one or two in the outputs: e.g. in the plots and excel file produced when you run the example script, the Python version uses sites [0, 1, 2] instead of [1, 2, 3] as in MATLAB
- If you are using PyCharm, I think you will need to disable plotting in SciView, unless you want loads of separate figures for ant paths
- I have found that keyboard input doesn't work as smoothly in Python as it does in MATLAB, but it doesn't cause me too many problems

