In Methods section

* Describe the fitness factor – how you test whether the configuration is good.

In Results

1) Describe results from the 2/2/2/2 case – low threat

a) calculate fitness for each run

b) average all fitness factors for each permutation

c) histogram the average fitness factors for a particular number of ants

c) Selected the permutations with the best fitness, and made histograms for each parameter to determine the parameters that lead to the best fitness.

Show results (plots)

Describe, discuss why they are they are (briefly)

2) Describe results from the 2/2/2/2 case – high threat

a) calculate fitness for each run

b) average all fitness factors for each permutation

c) histogram the average fitness factors for a particular number of ants

c) Selected the permutations with the best fitness, and made histograms for each parameter to determine the parameters that lead to the best fitness.

Show results (plots)

Describe, discuss why they are they are (briefly)

3) Using best parameters for low threat, run the first case done in the paper (large/small with narrow entrance), vs number of ants

a) Show result

4) Using best parameters for low threat, run the second case done in the paper (wide/narrow entrances for large cavity), vs number of ants

a) Show result

Discussion/Conclusions

* Discuss reasons for low threat and high threat best fitness parameters, and what the differences are, and why
* Discuss comparison between first case from paper between simulation and the “optimum” plot in the paper. What is the same, what is different, and why
* Discuss comparison between second case from paper between simulation and optimum plot. What is the same, what is different, and why
* Discuss comparisons between simulation and experimental measurements.