Weekly reports are to be emailed to atbecker@uh.edu by 5:00pm on Tuesdays. The purpose of a weekly report is to: (1) give you text and images for your papers, thesis, and dissertation, (2) document progress, (3) identify if you are stuck or need resources.

Weekly report

1. **My *Goals* from last week**
   - MATLAB ROS Revisions
   - Global SwarmConvergence in Circle
   - Physical Experiments with new Particles
2. **My *Accomplishments* this week**
   a. BFS_Expansion
      i. Code can be found on my fork of the Github.
         1. https://github.com/danielbao/IROS2017mappingParticles/tree/master/code/matlab
      ii. The code works. Preliminary results indicate around the same moves as ClosestFrontier
      iii. Tested 10 trials of varying particle numbers to get preliminary results
   b. CircularSwarm Convergence
      i. Used NSolve, but fixing the geometrical approach too
      ii. Used white triangle to paint over excess disk, didn't work for multiple robots.
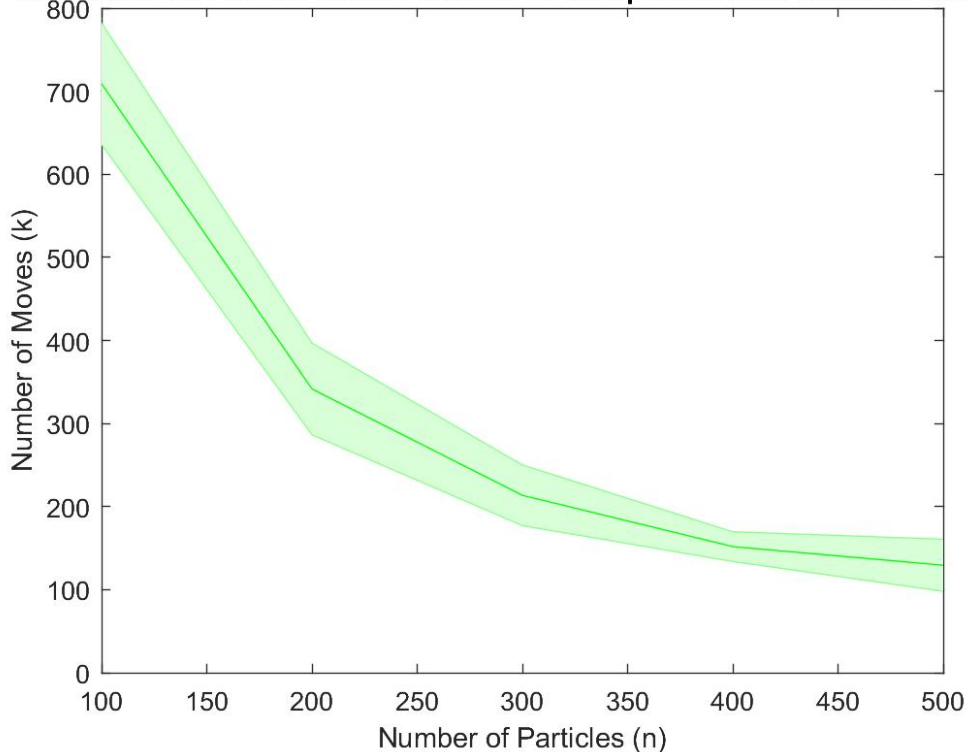   iii. Working on discretization and geometrical fixing

Figure 1: Some preliminary results from BFS_Expansion from our completed MATLAB code.

3. **My *Goals* for next week**
   - MATLAB ROS Finishing
   - IROS/URD Poster
   - Circular Convergence
     o Interactive buttons and such.
     a. Meeting with Dr. Becker on Thursday or Friday?
4. **What I need Dr. Becker to do:**
   a. Help approve my poster once I'm done