Dear editors,

We are submitting our manuscript "Steering a Particle Swarm Using Global Inputs and Swarm Statistics", to be published in IEEE Transactions on Robotics (TRO). Authors are Shiva Shahrokhi, Lillian Lin, Chris Ertel, Mable Wan, and Aaron T. Becker.

This paper combines the content of two preliminary conference papers, extending their substance and providing full details in a single journal paper. These papers are in two installments of the IEEE International Conference on Intelligent Robots and Systems (IROS 2013 and IROS 2015). The first conference paper covered the first three months of SwarmControl.net experiments, and the second one presented simulations of object manipulation. This paper presents three years of results from new games at SwarmControl.net. For object manipulation, this paper presents robust new algorithms for manipulation, path planning, and obstacle avoidance, and a rich set of parametric studies. All hardware validation experiments are new.

We believe that the topic is a perfect fit for the scope of your journal and are hopeful that editors and reviewers share the opinion that this submission will be of interest to the readers of IEEE Transactions on Robotics.

With Best Regards,

Aaron T. Becker (on behalf of all authors)