Particle Swarm Optimization

With Novel Heuristics

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We mean to implement PSO and then run it against all of the models that are in moeaProblems.pdf. We will add a number of different heuristics to our PSO implementation. One such heuristic we have discussed is using one particle as a predator and having it greedily chase the entire swarm's best known position while the rest of the swarm flees the predator. Another heuristic will combine particles as the come in proximity joining together to form a big particle. As the particles grow they will increasingly become more repulsive. We hope to implement other possible heuristics as we develop greater familiarity with PSO. Deliverables include both code, a report ranking the affect of heuristics, and visuals showing the affect of the heuristics.