PSO Homework

Minimize

-; -

*Minimum≒ -1.0316 at (x,y)=(0.0898,-0.7126) and)(-0.0898,0.7126)*

* Develop a particle swarm optimization algorithm to the above test case, starting with a random population.
* Write a program to test the algorithm: use 100 particles; still round the values to the third decimal place
* Upload your report (in one file) to the Tronclass system before **1:00 am on April 29, 2013**

In your report, indicate

* Definition of particle position, pBest, and gBest
* Selection of tuning parameters: inertia weight, acceleration constants, velocity maximum
* Whether you use the ordinary PSO or some variants
* Final solution and evolution history
  + keep the best objective value up to the current generation as the record; report the record at different generations;
* Program code **with clear explanations**