## **GQPMC** Report

James Kyubin Kwon

## 1. Posterior evaluation

The log posterior was evaluated for all 10 galaxies for every 500 iteration. All of them were monotonically increasing. The rate of increase varied. When the posterior was not significantly increasing, the median in the walker-percentile plot was remained almost stationary with respect to iteration. (galaxy 10) No local minima in posteriori were found.

The plots are attached together as 'posterior percentile.pdf'

## 2. Scattering walker distribution

Galaxy #5 (igal 4) diverged and the chain had to be aborted. The chain will be run again from igal4 to igal 9. For all 4 galaxies, scattering the walkers led to faster convergence schematically. The plots are attached as 'Comparison.pdf'