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Convergence of a particle swarm optimization algorithm DAVID HICKMAN, CAVENDISH MCKAY, Marietta College — In recent years particle swarm optimization (PSO) has been successfully applied to many research and engineering optimization problems. PSO has shown superior performance over other global optimization algorithms for problems with a large number of dimensions, or when the response surface is highly multimodal. We investigate the effects of dimensionality and internal PSO parameters on the rate of convergence.

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