Contribution ID: **30**   Type: **not specified**

Genetic algorithms

Monday, July 21, 2014 5:45 PM (1 hour)

Optimization problems are very common in high energy particle (astro-) physics. In this tutorial we want to BROADen the typical optimization toolkit known to physicists by introducing so-called genetic algorithms (GA). These algorithms are very powerful when it comes to optimizing abstract or high dimensional problems.

In this course we want to discuss the main concepts and give an overview of the most common problems GAs are applied to. A large part of the course will be dedicated to experimenting with existing implementions so that the participants can form their own opinion.

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Session Classification: Tutorials