

Divergence Techniques in High Energy Physics

- Signal classification from D0 Experiment at Tevatron in Fermilab
- Phi divergences
- Monte Carlo vs Data agreement – hypothesis testing
- Weighted modifications of standard homogeneity tests
- Numerical verification of proposed tests
- Kernel density estimation and its adaptive modifications
- Proposal of Decision tree for signal separation
- Control plots for binary classification
- Optimal cut for classification discriminants