



Contribution ID: 69

Type: **not specified**

## Modern HEP Data Analysis - How to handle the growing complexity

*Friday, September 5, 2014 10:27 AM (8 minutes)*

In the era before 'Big data' LHC physicists used clustering algorithms to join 3 dimensional objects together inside their detectors. Now similar algorithms, working in N dimensions, are revolutionising the way that people choose which TV to watch, how the business world makes transactions and even how geeks find love. Clustering can be used to create structures that isolate nuances in the larger data set, infer the properties of missing variables, or split the data into smaller chunks for which more focused algorithms can be optimised. The science of clustering algorithms focus on how to both how such applications can be optimised, how clusters can be recombined combined and how to verify the validity of the properties that these clusters suggest.

**Presenter:** FRIESE, Raphael Marius (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Presentations by students