Things I'd like to do next - 1

- Introduce kd-trees to improve
  - Range searches in TTrees
  - Nearest neighbor searches in TTrees
- kd-tree takes
  - $O(k*n*\log(n))$ time and $O(k*n)$ storage, where n is the number of entries and k the number of dimensions
- k-dim range query then takes
  - $O((n^{1-1/k} + n_o))$, where n_o is the number of entries in the range

Things I'd like to do next - 2

- Loess – locally weighted polynomial regression
  - Already half-done
  - Fitting curves and surfaces by smoothing
  - Combines simplicity of linear least-squares with flexibility of non-linear models
  - Robust against outliers
  - No analytical fit function necessary

Things I'd like to see happen

- Consolidation of math libraries:
  - No code duplication between TMath and Mathcore
  - TF1 using new math classes
- More analysis methods coming from experiments (like TMVA), in particular, a confidence limits framework.
- Bitmap indices and unification of all tree-indexing classes