

# Visualization and Exploration of High Dimensional Data

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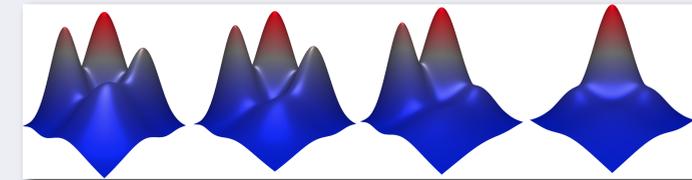
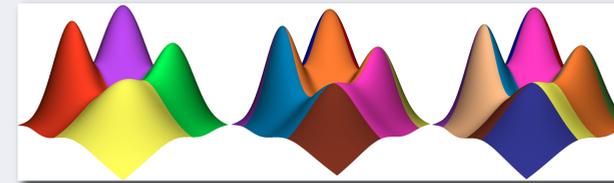


## Goals:

- multi-scale exploratory analysis of scalar functions
- understand relationship between input parameters and output
- interactively differentiate features from noise

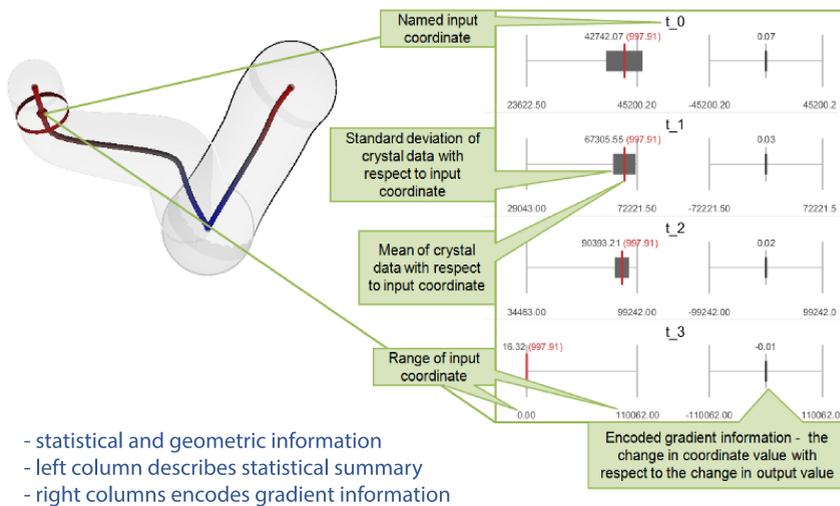
## Tools:

### 1. Morse-Smale Complex

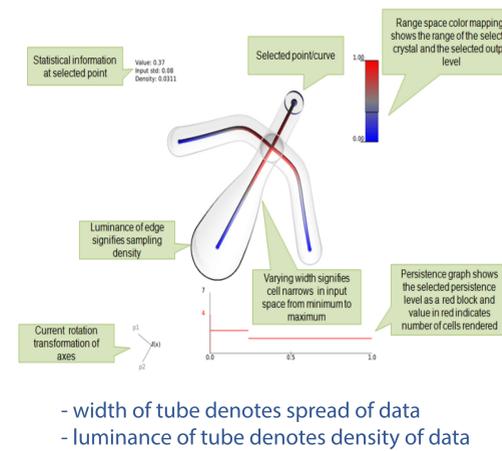
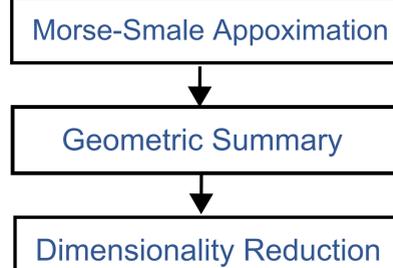


### 2. Persistence simplification

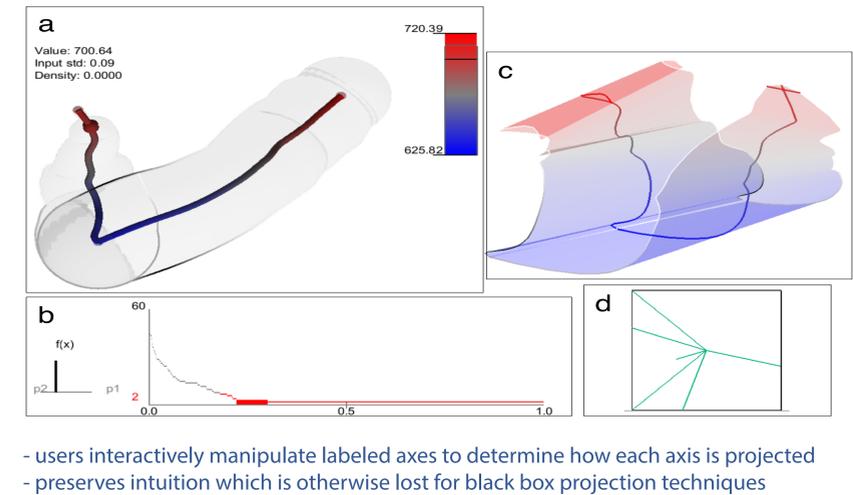
## Statistical Summary



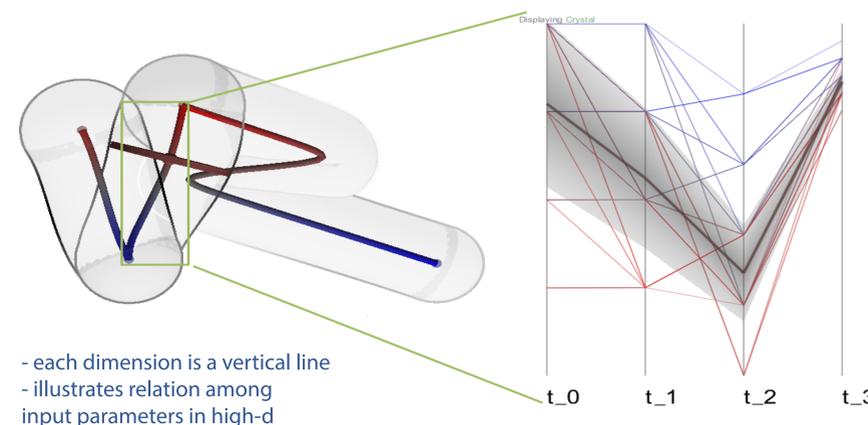
## Topological summary



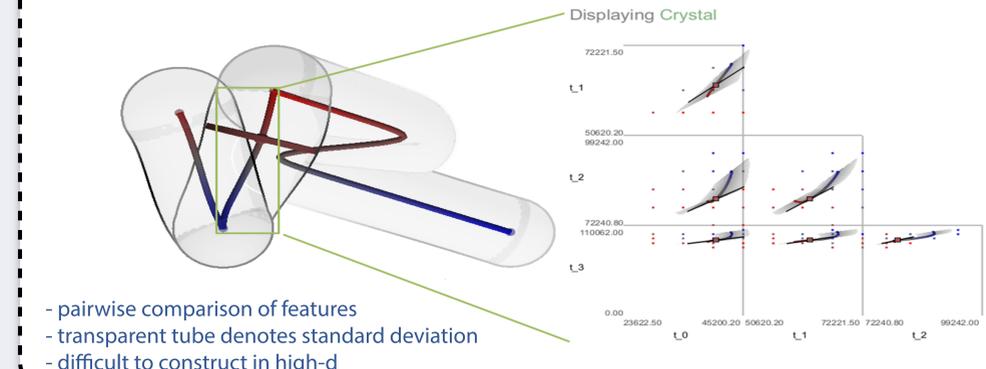
## Interactive Projection



## Parallel Coordinate Plots



## Pairwise Scatter Plot



## Inverse Coordinate Plot

