

Workshop on Algorithms for Time-Series Analysis

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Summary. This Workshop covered the four major subjects listed below in two 90-minute sessions. Each talk or tutorial allowed questions, and concluded with a discussion.

Classification: Automatic classification using machine-learning methods is becoming a standard in surveys that generate large datasets. Ashish Mahabal (Caltech) reviewed various methods, and presented examples of several applications.

Time-Series Modelling: Suzanne Aigrain (Oxford University) discussed autoregressive models and multivariate approaches such as Gaussian Processes.

Meta-classification/mixture of expert models: Karim Pichara (Pontificia Universidad Católica, Chile) described the substantial promise which machine-learning classification methods are now showing in automatic classification, and discussed how the various methods can be combined together.

Event Detection: Pavlos Protopapas (Harvard) addressed methods of fast identification of events with low signal-to-noise ratios, enlarging on the characterization and statistical issues of low signal-to-noise ratios and rare events.
