Fuzzy Classification and Visualization of Proteomic Spectra

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The talk presents new developments in the field of the analysis of mass spectrometric data. These data are characterized by high-dimensionality and their functional character. Both aspects are addressed in the talk: First, the extensive preprocessing is discussed ranging from baseline correction to advanced peak picking. After this part we will consider an extension of Kohonen's self-organizing map for fuzzy classification and its application for spectra classification and visualization. This class imaging ability is demonstrated for visualization of cancer areas in tissues based on their mass spectrometric profile.