STATISTICAL TECHNIQUES APPLIED TO IMAGES OF THE DYNAMIC SPECKLE

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- *ABSTRACT: This study used cluster analysis on images obtained from cells of bovine semen illuminated by laser light. The groups consisted of rates of low, medium and high cellular activity obtained from the moment of inertia. The results showed that the techniques of multivariate analysis were applied successfully to all living cells, allowing the reduction of the size of structures and facilitating the interpretation of the analysis by the construction of clusters composed of fewer information. We observed the natural decay rates of cellular activity with the passage of time and separation of STS's headquarters in predefined groups that contained lines with different levels of cellular activity.*

- *KEY WORDS: Bio-Speckle; matrix STS; multivariate analysis; clusters; moment of inertia*

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