

DSS Statistics Seminar

April 30, 2021, 12:00

<https://uniroma1.zoom.us/j/86881977368?pwd=SWRFcVFjMDZTa0lXZk05TE1zNm5adz09>

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MULTIWAY EXTENSIONS OF THE SVD

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In this presentation I will provide a pictorial overview of extensions of the two-way singular value decomposition (SVD) to three-way SVD variants; variants because there are several extensions none of which have all the properties of the two-way SVD. Multiway extensions will be mentioned in passing. The level of exposition is primarily at a conceptual level. This is achieved by presenting concepts in pictures accompanied by the model formula. For more technical aspects, one is referred to the extensive literature. An example will be shown about the assignment of paintings to art historical groupings based only on the cracks visible in their surfaces without reference to what is depicted. Moreover, it will be shown that amateurs are as good as experts in this respect.



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