Fair Allocation of Indivisible Goods: Recent Advances on the Maximin Share Criterion

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In this talk, I address the challenge of fairly allocating mmm indivisible items among n agents with diverse preferences, focusing on the *maximin share (MMS)* fairness criterion. The MMS captures the minimum value an agent can secure by dividing the items into n bundles and receiving the least desirable one.

I will survey recent approximation results for the MMS guarantee under various valuation classes, including additive, submodular, XOS, and subadditive valuations.