

# Qualitative Properties of the Minimum Sum-of-Squares Clustering Problem

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**Abstract:** A series of basic qualitative properties of the minimum sum-of-squares clustering problem are obtained. Among other things, we clarify the solution existence, properties of the global solutions, characteristic properties of the local solutions, locally Lipschitz property of the optimal value function, locally upper Lipschitz property of the global solution map, and the Aubin property of the local solution map.

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