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Typical and generic ranks in low-rank matrix completion.

Given a matrix where only a subset of the entries are known, the low-rank matrix completion problem asks for the lowest possible rank that the completed matrix can have. For complex matrices with sufficiently generic known entries, the solution to the low-rank matrix completion problem only depends on the pattern of known entries and not the specific values observed. For real matrices, this is not the case. This talk will address some basic questions related to this phenomenon. (Received February 05, 2018)