1145-05-1934 **Louis Deaett*** (louis.deaett@quinnipiac.edu). *Matroids and the minimum rank of a matrix pattern.* Preliminary report.

If we don't know the entries of a matrix, but we do know which of them are zero, what can we say about the rank of the matrix? Depending on the pattern of zeros and non-zeros, sometimes we can give the rank exactly. If not, we can still ask how small the rank could be. This is a combinatorial question about rank, so it's natural to ask what what we can find out from the perspective of matroid theory. The answer, as it turns out, is quite a bit. And by taking this perspective, we can gain a better understanding of some previous results about this problem, extend them a bit, and even generalize the question itself to different matroid-theoretic contexts. (Received September 24, 2018)