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Ae Ja Yee*, 327 McAllister, State College, PA 16801. *Euler's partition theorem for all moduli and a generalization of the lecture hall partition theorem.* Preliminary report.

One of the well-known partition theorems is Euler's theorem on partitions into distinct parts and partitions into odd parts. Various refinements and generalizations of the theorem can be found in the literature. For instance, the lecture hall partition theorem is its finite version. Recently, Keith and Xiong showed another generalization of Euler's theorem. Motivated by their work, we consider a finite version of their generalization, which yields the lecture hall partition theorem. This talk is based on joint work with S. Fu and D. Tang. (Received September 25, 2018)