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Jon F Carlson and **Sunil K Chebolu*** (schebolu@uwo.ca), Department of Mathematics, University of Western Ontario, London, ON N6A 5B7, Canada, and **Ján Mináč**. *Finite generation of Tate cohomology and Freyd's generating hypothesis.*

It is a well-known theorem of Evens and Venkov that if G is a finite group and M is a finitely generated kG -module, then $H^*(G, M)$ is a finitely generated module over $H^*(G, k)$. The corresponding statement for Tate cohomology is false in general. In fact, we show that $\widehat{H}^*(G, M)$ is finitely generated over $\widehat{H}^*(G, k)$ for all finitely generated kG -modules M if and only if BG has periodic cohomology. Even when BG has non-periodic cohomology, we show that there are kG -modules which have finitely generated Tate cohomology. These examples help disprove the the analogue of Freyd's generating hypothesis in the stable module categories for groups with non-periodic cohomology. (Received September 06, 2007)