1057-55-63 **Sunil Kumar Chebolu*** (schebol@ilstu.edu), Department of Mathematics, Illinois State University, Campus box 4520, Normal, IL 61790. *Progress report on the generating hypothesis.*

Freyd's generating hypothesis is a very fundamental and deep statement about the category of finite spectra. It is a conjecture due to Peter Freyd (1965) which states that the stable homotopy functor on the category of finite spectra is faithful. An unbelievable consequence of this conjecture is that it reduces the study of finite CW spectra to that of graded modules over the homotopy ring of the sphere spectrum. Therefore this conjecture stands as a central problem in the homotopy theory which is still open. To the best of my knowledge there hasn't been any progress on this conjecture in the recent years. However, there has been lots of developments on analogues and variations of this conjecture on other axiomatic stable homotopy categories including equivariant stable homotopy categories, derived categories, and the stable module categories of finite groups. This talk will be a survey of these results with particular emphasis on the stable module categories which is joint work with Jon Carlson and Jan Minac. (Received January 02, 2010)