1047-11-359　　　　　**Pace P. Nielsen*** (`pace-nielsen@uiowa.edu`), 15 MLH, Iowa City, IA 52242. *Covering systems old and new.* Preliminary report.

We give a brief overview of covering systems, including the methods used in the construction of a covering system whose smallest modulus is 40. We discuss methods, both old and new, developed with regards to existence questions for odd, square-free covering systems. Finally, we present evidence for a new conjecture on minimal growth for square-free covers. (Received February 02, 2009)