SUNIL CHEBOLU, Illinois State University

Groups with periodic cohomology

I will present the role of groups with periodic cohomology when studying the following problems.

- 1. When is the Tate cohomology functor faithful on the thick subcategory generated by k, the trivial representation of G?
- 2. When is the Tate cohomology of a finitely generated kG module finitely generated over the Tate cohomology of G with coefficients in k?
- 3. Which groups occur as the group of units of a ring?

This is based on joint projects with Jon Carlson, Jan Minac and Keir Lockridge.