TOPOLOGY SEMINAR

High acyclicity of p-subgroup complexes for the symmetric groups

By

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Abstract: For any finite group G and a fixed prime p, the topology of the poset of nontrivial elementary abelian p-subgroups contains significant information about the representations of G in characteristic p. For the symmetric group, this poset and its homology remain rather mysterious. A reasonable conjecture is that larger symmetric groups should have topologically more connected posets. I will rephrase this conjecture as a representation stability phenomenon ala Church-Ellenberg-Farb, and provide evidence for it by exhibiting high acyclicity of certain subposets.

Date: April 29, 2019 Monday
Time: 13:40 – 14:40
Place: SA141 Mathematics Seminar Room

* Tea and cookies will be served after the talk. All are most cordially invited.