

ALGEBRA SEMINAR

Finiteness Properties in Free and Residually Free Groups

Dennis Spellman
Fairfield University

Every free group of rank at least 2 has subgroups that are not finitely generated. But some finiteness properties are still satisfied in free groups. Every free group is residually finite, and hence so is every residually free group. A theorem of Howson asserts that the intersection of any two finitely generated subgroups of a free group is also finitely generated. Kharlampovich, Myasnikov, Remeslenikov and Serbin have recently extended Howson's theorem to fully residually free groups. I shall prove that the Howson property fails for every residually free group that is not fully residually free.

Monday, October 17, 2005, 1:40 – 2:30 pm,
Wachman 617