



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Ric Wade

Oxford Univ.

*Free groups, automorphisms,
and commensurations*

WED APR 05, 2023, MH320

Abstract: Free groups are groups that are ‘the most free,’ i.e., have no relations other than those imposed by the group laws. For this reason, we should not be too surprised that they are incredibly flexible and have rich and interesting automorphism groups. But what if you take the automorphism group of the automorphism group? Surprisingly, the answer, due to Dyer and Formanek (1975), is that we get nothing new (I’ll explain precisely what this means). I’ll give some history and an introduction to the area, and describe a new theorem of Martin Bridson and myself that says even when you loosen automorphisms to things called commensurations, the analogous result still holds.

Background: One semester abstract algebra.

About the speaker: Ric Wade (he/him) received his Ph.D. from Oxford, and worked at U. Utah, the Univ. of British Columbia, and MSRI/SLMath before moving back to the UK. He is currently a Royal Society University Research Fellow at Oxford’s Mathematical Institute. His work is in geometric group theory, particularly in automorphism groups and on the connections between group theory and topology.

SNACKS IN MACQUARRIE HALL 331B AT 2:40PM

TALK STARTS AT 3:00PM

For more information, see our full schedule at:

<http://www.timhsu.net/colloq/>