

Relating rank varieties and support varieties for
modules of self-injective algebras
(joint work with Miles Holloway)

Karin Erdmann

We provide an alternative, more representation theoretic, proof of the Avrunin Scott theorem that links the support variety to the rank variety associated with a module over an elementary abelian group algebra. We then use these ideas to prove the analogue of this Avrunin Scott theorem for a certain class of local algebras. For these algebras the support variety is the Hochschild support variety (a la Snashall and Solberg) and the rank variety was constructed earlier by us.