

Andrew Snowden: **Connections between commutative algebra and representations of categories**

In recent years, there has been a surge of interest in the representation theory of categories, with applications in algebraic geometry, topology, and elsewhere. In cases of interest, the representations behave very similarly to modules over a commutative ring, and notions from commutative algebra (such as noetherianity, local cohomology, Grobner bases, etc) have proved useful. I will outline some of the motivations and applications of the subject, and then go into more detail about the connections with commutative algebra.