Q-Koszul algebras are positively graded algebras which have strong homological and structural properties. They arise naturally in the modular representation theory of semisimple algebraic groups. This is true if the characteristic is very large, but (remarkably) seems also to hold in some cases when the characteristic is small. This talk will define Q-Koszul algebras and discuss some recent work on them. It is joint work with L. Scott. (Received January 26, 2014)