1035-16-796 **A S Dugas**, Department of Mathematics, University of California at Santa Barbara, Santa Barbara, CA 93106, **B Huisgen-Zimmermann***, Department of Mathematics, University of California at Santa Barbara, Santa Barbara, CA 93111, and **J Learned**, University of California at Santa Barbara, Department of Mathematics, Santa Barbara, CA 93111. *The homology and geometry of truncated path algebras.*

A truncated path algebra of a quiver Q with coefficients in a field K is a quotient of the path algebra KQ, modulo the ideal generated by all paths of a fixed given length. We will see that such algebras are homologically transparent, while still displaying a wealth of phenomena. Next to the classical homological invariants, one can readily determine the generic homological dimensions attained on the irrreducible components of the corresponding varieties of representations of finite dimension. In fact, given the Loewy length of the algebra, a combinatorial look at the quiver suffices to unravel the full story. (Received September 15, 2007)