962-16-135 **Darren B Parker*** (parker@whitetail.bemidji.msus.edu), Department of Mathematics/Computer Science, Bemidji State University, 1500 Birchmont Dr. NE, Bemidji, MN 56601. *Descent Theory for Duals of Inseparable Field Extensions.* Preliminary report.

Let K be a field. We investigate the descent theory of finite-dimensional K-coalgebras, paying particularly close attention to duals of inseparable field extensions of K. Specifically, if C is a finite-dimensional coalgebra, we look at the coalgebra filtration of $E \otimes C$. We consider the case where $E \otimes C$ is pointed, and use a result of Taft and Wilson to characterize $(E \otimes C)_1$ and $(E \otimes C)_2$. (Received August 08, 2000)