1017-16-11 Vladislav K. Kharchenko^{*} (vlad@servidor.unam.mx), FES-Cuautitlan, UNAM, Primero de Mayo s/n, Campo 1, CIT, 54768 Cuautitlan Izcalli, de Mexico, Mexico. *PBW-bases of coideal subalgebras.* Preliminary report.

Let H be a pointed Hopf algebra generated by skew-primitive semi-invariants with respect to the adjoint action of the coradical. Every right coideal subalgebra \mathbf{U} that contains the coradical has a PBW-basis which may be extended up to a PBW- basis of H. If additionally \mathbf{U} is invariant with respect to the left adjoint action, then H is a free left (and right) \mathbf{U} -module with a free PBW-basis over \mathbf{U} . These results remain valid if H is a braided Hopf algebra generated by a categorically ordered subset of primitive elements. If the ground field is algebraically closed, the results are still true provided that H is a pointed Hopf algebra with the commutative coradical and is generated over the coradical by finite-dimensional Yetter-Drinfeld submodules of primitive elements. (Received November 26, 2005)