1048-16-374   **William Chin*** (`wchin@condor.depaul.edu`), DePaul University, Dept. of Mathematical Sciences, Chicago, IL 60610, and **Daniel Simson** (`simson@mat.uni.torun.pl`), Faculty of Mathematics and Computer Science, Nicolaus Copernicas University, Torun, Poland. *Coxeter transformation and inverses of Cartan matrices for coalgebras.*

Let C be a coalgebra and consider the Grothendieck groups of left and right socle-finite injective comodules. We study the Coxeter transformation and its dual for certain classes of coalgebras and relate them to the Auslander-Reiten translate and the end terms of almost split sequences. (Received February 10, 2009)