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**Emre Sen\*** ([sen.e@husky.neu.edu](mailto:sen.e@husky.neu.edu)). *Determinants of Graded Cartan matrices of Nakayama algebras*. Preliminary report.

We give a new algorithm to describe periodic modules over cyclic Nakayama algebras by  $\Delta$ -filtrations introduced at [S]. Then we apply it to Cartan matrices associated to those algebras and show that two nonisomorphic cyclic Nakayama algebras of infinite global dimension cannot have the same determinant of their graded Cartan matrices even with different gradings.

[S] The  $\varphi$ -dim of cyclic Nakayama algebras, Sen. E. preprint (Received February 18, 2018)