

1138-05-250

**Ricky Ini Liu\*** (riliu@ncsu.edu), **Karola Mészáros** and **Alejandro H. Morales**. *Flow polytopes and the space of diagonal harmonics*.

A result of Haglund implies that the  $(q, t)$ -bigraded Hilbert series of the space of diagonal harmonics is a  $(q, t)$ -Ehrhart function of the flow polytope of the complete graph with netflow vector  $(-n, 1, \dots, 1)$ . We study the  $(q, t)$ -Ehrhart functions of flow polytopes of threshold graphs with arbitrary netflow vectors. Our results generalize previously known specializations of the mentioned bigraded Hilbert series at  $t = 1, 0$ , and  $q^{-1}$ . (Received February 11, 2018)