1176-14-351 Allen Knutson* (allenk@math.cornell.edu), NY 14850. Microlocal geometry of the terms in the Duistermaat-Heckman theorem.

(One version of) the Duistermaat-Heckman theorem writes the Duistermaat-Heckman measure of $T \circlearrowright (M, \omega)$ as an alternating sum of projections of cones. Each edge of these cones is either aligned with a weight of the isotropy action of T on the tangent spaces T_pM , or with its negative. I'll explain how to interpret each *single* term in this sum as itself the D-H measure of a subvariety of T^*M , giving thereby a sort of algebro-geometric version of the Viktor Ginzburg-Guillemin-Karshon "symplectic cobordism" proof of the D-H formula. This uses Victor Ginzburg's interpretation of Chern-Schwarz-MacPherson classes. Then I'll show how an extension gives other similar formulæ, such as the Brianchon-Gram theorem for the Lebesgue measure of a polytope. (Received January 25, 2022)