Thomas Reichelt and Uli Walther* (walther@purdue.edu). Weight filtration on Hodge modules coming from toric embeddings.

We describe the weight filtration on the Hodge module that arises as direct image of the structure sheaf of the d-torus under the toric (monomial) map induced by the d by n integer matrix A, if the semigroup of A is saturated. The graded parts are combinatorial ad not arithmetic, and express the failure of the cone of A to be simplicial. (Received June 12, 2019)