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**Kevin Purbhoo\*** ([kevinp@math.ubc.ca](mailto:kevinp@math.ubc.ca)), 1984 Mathematics Rd., University of British Columbia, Vancouver, BC V6T 1Z2, Canada. *Chow classes in toric varieties via tropicalization*. Preliminary report.

Given an algebraic cycle  $Y$  inside a toric variety  $X$ , its tropicalization is a fan inside  $\mathbb{R}^n$  with multiplicities attached to the maximal cones. We can ask what information about  $Y$  is encoded in this tropicalization. I will discuss an approach for computing the tropicalization of  $Y \cap D$  from the tropicalization of  $Y$ , where  $D$  is a  $T$ -cartier divisor on  $X$ . Applications include finding explicit  $T$ -representatives for the class of  $Y$  in the chow group  $A_*(X)$ . Everything can be done equivariantly, if  $Y$  is invariant under a subtorus of  $T$ . (Received September 05, 2006)