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Abstracts of Short Communications and Posters

Section:

13. Combinatorics

1991 MS Classification: 52 B 05, 14 M 25
Altmann, Klaus, Humboldt-University Berlin
Hodge numbers for polytopes
For any compact polytope P, Danilov has defined numbers $h^{i,j}(P)$ reflecting the combinatorics of P. In case P is rational, they equal the Hodge numbers of the corresponding projective toric variety.
As a second application, we discuss the relation of these polytopal Hodge numbers to deformation theory and present a vanishing theorem for $h^{1,2}$.