

Battaglia and Zaffran computed the basic Betti numbers for the canonical holomorphic foliation on a moment-angle manifold Z_K corresponding to a shellable fan. They conjectured that the basic cohomology ring in the case of any complete simplicial fan has a description similar to the cohomology ring of a complete simplicial toric variety due to Danilov and Jurkiewicz. In this work we prove the conjecture. The proof uses an Eilenberg-Moore spectral sequence argument; the key ingredient is the formality of the Cartan model for the torus action on Z_K .

This is a joint work with Hiroaki Ishida and Roman Krutowski.