

Dual complexes of log Calabi-Yau pairs and Mori fibre spaces

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Dual complexes are CW-complexes, encoding the combinatorial data of how the irreducible components of a simple normal crossing pair intersect. They have been finding useful applications for instance in the study of degenerations of projective varieties, mirror symmetry and nonabelian Hodge theory. In particular, Kollár and Xu have asked whether the dual complex of a log Calabi-Yau pair is always a sphere or a finite quotient of a sphere. It is natural to check first if this holds on the end products of minimal model programs. In this talk, we will give a positive answer for Mori fibre spaces of Picard rank two.