Nef anti-canonical divisors and rationally connected fibrations

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We study the Iitaka–Kodaira dimension of nef relative anti-canonical divisors. As a consequence, we prove that given a complex projective variety with klt singularities, if the anti-canonical divisor is nef, then the dimension of a general fibre of the maximal rationally connected fibration is at least the Iitaka–Kodaira dimension of the anti-canonical divisor.

This is a joint work with Sho Ejiri.