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On higher-rank Khovanskii-Teissier inequalities. (English) Zbl 07424002
J. Funct. Anal. 282, No. 1, Article ID 109264, 24 p. (2022)

Summary: We shall discuss a higher-rank Khovanskii-Teissier inequality, generalizing a theorem of Li in [14]. In the course of the proof, we develop new Hodge-Riemann bilinear relations in certain mixed and degenerate settings, which in themselves slightly extend the existing results and imply new Khovanskii-Teissier type inequalities and log-concavity results.

MSC:
32S35 Mixed Hodge theory of singular varieties (complex-analytic aspects)
14C20 Divisors, linear systems, invertible sheaves
32Q15 Kähler manifolds
32J25 Transcendental methods of algebraic geometry (complex-analytic aspects)

Keywords:
Khovanskii-Teissier inequality; mixed Hodge-Riemann bilinear relation; generalized m-positivity; Gårding inequality

Full Text: DOI

References:
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