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Distortion in Cremona groups

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Abstract. We study the distortion of elements in two-dimensional Cremona groups over algebraically closed fields of characteristic zero. We obtain the following trichotomy: non-elliptic elements (*i.e.*, those whose powers have unbounded degree) are undistorted, and elliptic elements have a doubly exponential distortion when they are virtually unipotent or an exponential distortion otherwise.

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