

Essential dimension

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Essential dimension is a numerical measure of the complexity of G torsors for G an algebraic group. Over an algebraically closed field, the essential dimension is bounded below by the smallest non-negative integer k such that there is a non-zero cohomological invariant of G in degree k . I will discuss essential dimension and cohomological invariants and the relationship (due to Totaro) between cohomological invariants and unramified cohomology.