

The Hasse norm principle for abelian extensions

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Let L/K be a normal extension of number fields. The Hasse norm principle is a local-global principle for norms. It is satisfied if any element x of K is a norm from L whenever it is a norm locally at every place. For any fixed abelian Galois group G , we investigate the density of G -extensions violating the Hasse norm principle, when G -extensions are counted in order of their discriminant. This is joint work with Dan Loughran and Rachel Newton.