

Chern numbers of singular varieties generate the whole integer lattice

Abstract

Chern numbers of smooth complex compact varieties of dimension n don't generate the whole lattice $\mathbb{Z}^{p(n)}$, where $p(n)$ is the number of partitions of the number n . For example $2 \mid c_1[C]$ for every smooth complex compact curve C . In the talk we will prove that Chern numbers of singular complex compact varieties defined by using Nash transformation generate the whole lattice $\mathbb{Z}^{p(n)}$.