Oberseminar Zahlentheorie und arithmetische Geometrie

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(Hannover)

Mirror symmetry of Borcea-Voisin varieties

Borcea--Voisin threefolds feature historically among the f rst examples of mirror pairs. They are constructed as a particular quotient of the product of an elliptic curve and a K3 surface endowed with a non-symplectic involution. Some specif c examples can be studied quite explicitly by means of the Berglund-Hübsch construction. Together with A. Chiodo and E. Kalashnikov, we have generalized this construction to varieties of Borcea-Voisin type in any dimension. I will report on our joint work, which highlights how the mirror symmetry is due to two phenomena, namely the exchange of the cohomological invariant and anti-invariant subspaces, and a further mirror symmetry of the f xed loci which are "semi-Calabi-Yau varieties".

Donnerstag, 03.12.2015, 12:00 – 13:00, g117

Alle Interessierten sind herzlich eingeladen.