



Leibniz
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Oberseminar Institut für Algebraische Geometrie

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Ramification of maps between moduli spaces of Enriques surfaces

Barth and Peters showed that a generic complex Enriques surface has exactly 527 isomorphism classes of elliptic fibrations. We show that every Enriques surface has precisely 527 isomorphism classes of elliptic fibrations when counted with multiplicity. Their reducible singular fibers and the multiplicities can be calculated explicitly. The statements hold over any algebraically closed field of characteristic not two. To explain these results, we construct a moduli space of complex elliptic Enriques surfaces and study the ramification behavior of the forgetful map to the moduli space of unpolarized Enriques surfaces. Curiously, the ramification indices of a similar map compute the hyperbolic volume of the rational polyhedral fundamental domain appearing in the Morrison-Kawamata cone conjecture. This is work in progress with Víctor González-Alonso.

Donnerstag, 06.06.2024, 16:30 - 17:30, F142.

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Alle Interessierten sind herzlich eingeladen.