



Leibniz
Universität
Hannover

Oberseminar
Institut für Algebraische Geometrie

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Kummer surfaces with group schemes

We introduce Kummer surfaces $X = Km(C \times C)$ with the group scheme $G = \mu_2$ acting on the self-product of the rational cuspidal curve in characteristic two. The resulting quotients are normal surfaces having a configuration of sixteen rational double points of type A_1 , together with a rational double point of type D_4 . We show that our Kummer surfaces are precisely the supersingular K3 surfaces with Artin invariant at most 3, and characterize them by the existence of a certain configuration of thirty curves. After contracting suitable curves, they also appear as normal K3-like coverings for simply-connected Enriques surfaces.

Donnerstag, 16.01.2020

16:30 - 17:30, Raum b302

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.