



Leibniz  
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# Oberseminar Institut für Algebraische Geometrie

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## Computing isogeny classes of principally polarized abelian surfaces over the rationals.

We describe an efficient algorithm which, given a principally polarized (p.p.) abelian surface  $A$  over  $\mathbb{Q}$  with trivial geometric endomorphism ring, computes all the other p.p. abelian surfaces over  $\mathbb{Q}$  that are isogenous to  $A$ . We also report on a resulting dataset of 1538149 isogeny classes of Jacobians of genus 2 curves. Joint work with Raymond van Bommel, Shiva Chidambaram, and Jean Kieffer.

Donnerstag, 13.04.2023,

16:30-17:30, online.

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Alle Interessierten sind herzlich eingeladen.