

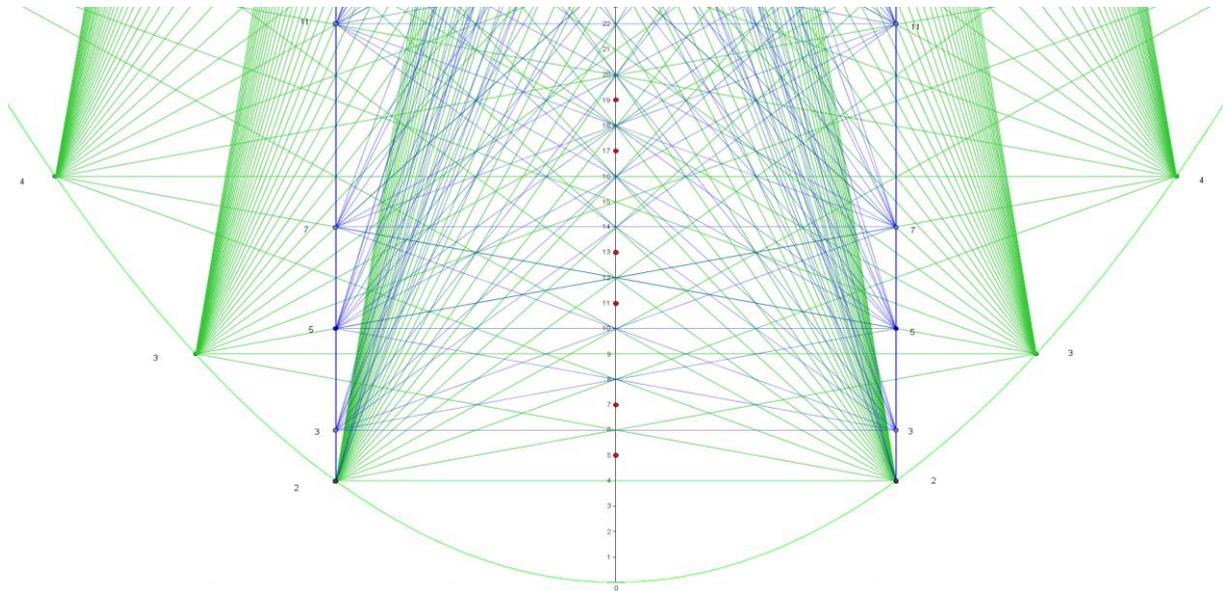
Mirror sieves : Goldbach vs Matiyasevich

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Abstract

The sieve of the addition of two prime numbers and the sieve of the product of two natural numbers are linked by a paradox of symmetrical objects. Goldbach's conjecture, additive version of a property of primes, would then have no chance being demonstrated if its multiplicative alter ego remained impenetrable to the disorder of prime numbers.

" Is not symmetry the soundboard on which nature writes his music ? " Denis Gratias
Mathematics gives the La, flanked by the intertwined attributes of a mirror that seems ontological as undefined][order, discrete][continuous, imaginary][real, 0][1, one][multiple, sum][product, prime][composite, arithmetic][geometry. From metaphor into metonymy, from the stage of the mirror to the identity, mathematics put themselves in scene : here for example, the number and the order with odd and even [1] ; there, two symbols with Ramanujan's formula [2]. Compare the sieves +][x [3].



Sieve of Christian Goldbach : 2 lines, dimension 1 - Sum of 2 prime numbers, in the center the even numbers and by deduction the odd numbers - Of the noise of the interaction of the prime numbers, emerges order.

Sieve of Yuri Matiyasevich : 1 conic, dimension 2 - Product of 2 natural numbers, in the center the composite numbers and by deduction the prime numbers - Of the noise of the interaction of the natural numbers, emerges disorder.

Thus, order and disorder cohabit at the seat of reciprocity of the system whose evolution is done thanks to the contradiction, which conjectures the utopia of a formula that would not be equipped with specific tools for the study the dynamics of mirror.

Références :

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