

YMC2004 TALK ABSTRACT

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Title: Modular Pascal Triangle

Description:

This project examines the congruence classes of binomial coefficients to a prime square modulus as given by a fractal generation process for lattice path counts. The process depends on the isomorphism of partial semigroup structures associated with each iteration. We also consider integrality properties of certain critical coefficients to arbitrary arguments, instead of just to the prime arguments appearing in their original function, it transpires that integrality of the coefficients is indicative of the primality of the argument.