

1033-05-132

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UNC-Charlotte, Charlotte, NC. *Bernoulli type games and combinatorial enumeration.*

We introduce a class of two-player games on posets with a rank function, in which each move of the winning strategy is unique. This allows to enumerate the kernel positions by rank. Our main example is a simple game in which the number of kernel positions of rank  $n$  is a signed factorial multiple of the  $n$ -th Bernoulli number of the second kind. A generalization of this game provides a combinatorial model for the degenerate Bernoulli numbers introduced by Carlitz. Using numerical integration formulas involving the Bernoulli numbers of the second kind, we show how to construct a scoring system such that the expected gain of a player becomes the integral of a given function on  $[0, 1]$ . (Received September 08, 2007)