Cunning Trap Must be Set!

The mischief of a chalk-stealing nymph has plagued the Mathematics department of Kings College since its foundation in 1946. Thankfully, generations of professors have been carefully recording the robberies as they occur. Through some careful analysis, a set of rules are developed from the data, and a mathematical model is studied. In this talk a difference equation is derived with the use of a generating function, while other methods are explored as well. The model is used to predict the ramifications of his future behavior, as well as to determine a method to best outsmart the nymph! Furthermore, if time permits, some numerical analysis based on this model will be provided. (Received September 15, 2008)