

ON A TIME-DEPENDENT EGGENBERGER-PÓLYA URN MODEL

May-Ru CHEN *National Sun Yat-sen University, Taiwan*, E-mail: chenmr@mail.math.nsysu.edu.tw

Abstract: The Eggenberger-Pólya urn model had been studied for a long time and there are several generalizations and applications in the literature. In this talk, we first review some generalized Eggenberger-Pólya urn models. Then we introduce a generalized Pólya-Eggenberger urn model proposed by Pemantle (1990). In his model, assume that the colors of balls in the urn are white and red and that the balls are added into urns are time dependent. We extend Pemantle's model and then discuss the limiting behavior of the sequence of the proportions of the white balls.