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**Ricardo Gómez\*** (rgomez@math.unam.mx), Institute of Mathematics, Area de la Investigación Científica, Circuito Exterior, Ciudad Universitaria, 04510 México, Mexico, and **Mark Daniel Ward** (mdw@purdue.edu), 150 North University Street, West Lafayette, IN 47907-2067.

*Asymptotic analysis of combinatorial schemas of polylogarithms.*

Motivated from classification problems of countable Markov shifts in symbolic dynamics, we develop an asymptotic analysis program of combinatorial schemas of polylogarithm functions. For example, sequence schemas are resolved using Flajolet's asymptotic analysis of polylogarithms, and the multiset schema approach is to follow the roadmap that utilizes Mellin transforms and saddle point asymptotics that is known to work for integer partitions. In this talk the motivation and a report on the asymptotic equivalences that we have obtained will be presented. (Received September 24, 2018)