

**ASYMPTOTICS AND SIGN PATTERNS FOR
COEFFICIENTS IN EXPANSIONS OF HABIRO
ELEMENTS**

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ABSTRACT. We prove asymptotics and study sign patterns for coefficients in expansions of elements in the Habiro ring which satisfy a strange identity. As an application, we prove asymptotics and discuss positivity for the generalized Fishburn numbers, which arise from the Kontsevich-Zagier series associated to the colored Jones polynomial for a family of torus knots. This extends Zagier's result on asymptotics for the Fishburn numbers. This is a joint work with Abhash Jha, Byungchan Kim, and Robert Osburn.