1054-37-217 **Michel L. Lapidus** (lapidus@math.ucr.edu), 900 Big Springs Rd, Surge Bldg, Dept of Mathmatics, Riverside, CA 92521, and **Robert G. Niemeyer*** (niemeyer@math.ucr.edu), 900 Big Springs Rd., Surge Bldg, Dept of Mathematics, Riverside, CA 92521. *Towards Periodic Orbits of the Koch Snowflake Billiard.* Preliminary report.

In this talk, we shall demonstrate significant analytical and experimental evidence suggesting the existence of periodic orbits of the Koch snowflake billiard. In addition, we outline exactly how we propose to demonstrate the existence of periodic orbits and give a major consequence in the form of an analogue to the Veech Dichotomy for Rational Billiards. (Received September 14, 2009)