1067-01-1110   **Byron E. Wall*** (`bwall@yorku.ca`), 218 Bethune College, York University, 4700 Keele Street, Toronto, Ontario M3J 1P3, Canada. *The lure of the fundamental probability set of equally likely events.* Preliminary report.

The mathematical theory of probability has its origins in attempts to answer questions about events occurring in games of chance. Probability has now broadened to encompass all manner of events, ranging from elaborate but fully understood human constructions, to prognostications about the behavior of ill-understood events in Nature. To apply the complex apparatus of probability to such a wide range of remarkably different situations, one great leveling device has been used, namely, that all possible outcomes are built from a fundamental probability set of equally likely events. This set comprises the atoms of a probability universe. With a set of equally likely events, the same probability theory that describes the chances in a dice game or on a roulette wheel can be applied to all manner of events in Nature. Without equally likely events, the elaborate apparatus of probability theory cannot be brought to bear. The temptation has been too great to see events as equally likely where there were no grounds for such an assertion, and as a result a great deal of nonsense has been propounded in the name of probability. This is a preliminary report of a work in progress. (Received September 18, 2010)