

Statistics of the Stern sequence

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The Stern sequence consists of denominators in the successive Farey fractions; it can also be defined by the simple recurrence relations $s(1) = 1$, $s(2n) = s(n)$, $s(2n+1) = s(n)+s(n+1)$. This talk will be on joint work with S. Bettin (Genova) and L. Spiegelhofer (Vienna), in which we study the statistical behaviour in the values $\{\log s(n) : 2^N < n < 2^{N+1}\}$: they satisfy a law of large numbers, a central limit theorem, and a large deviation principle. This is related to central limit theorems in non-commutative contexts.

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