

# On the decimal expansion of $e$

Yann BUGEAUD\*

[bugeaud@math.unistra.fr](mailto:bugeaud@math.unistra.fr)

---

It is commonly expected that  $e$ ,  $\log 2$ , the Golden Ratio,  $\pi$ , among other “classical” numbers, behave, in many respects, like almost all numbers. For instance, their decimal expansion should contain every finite block of digits from  $\{0, \dots, 9\}$ . We are very far away from establishing such a strong assertion. However, there has been some recent progress, and it is now possible to prove that the decimal expansion of  $e$ ,  $\log(2017/2016)$  and of any irrational algebraic number cannot be ‘too simple,’ in a suitable sense.

---

\*IRMA, U.M.R. 7501, Université de Strasbourg, 7, rue René Descartes, F-67084 Strasbourg Cedex, FRANCE