
Introducing *Logic and Analysis*

The “giants” among mathematicians of previous eras – even toward the middle of the 20th century – were masters of most of the mathematics of their day. They thus personified the essential unity of mathematics and its vital connection with the physical world. More recently research activity has mushroomed and the scope of mathematics has broadened so rapidly that this is no longer possible – leading to the compartmentalization of our subject. Nevertheless, we retain a strong sense of the unity of mathematics. In the modern development of our discipline many fundamental advances have involved the interplay of ideas from different and seemingly unconnected parts of mathematics (and physics).

Logic and Analysis promotes interaction between ideas or techniques from mathematical logic and those from other areas of mathematics. Such interaction has a significant and rich history and has widened considerably in the last fifty years. Mathematical logic makes contributions from areas such as introduction of new logics and languages, descriptive set theory, Robinson’s nonstandard analysis, logical foundations of constructive mathematics, definability theory and classification theory (especially stability theory, geometric model theory and o-minimality), proof theory and proof mining, and topos theory, while the areas of mathematics that are involved in such interplay include algebra (especially group theory and module theory), number theory (all aspects), analysis (especially functional analysis), dynamical systems, differential equations, measure theory, probability and stochastic analysis, topology (especially topological structures), geometry (algebraic, differential, and metric), mathematical physics, and mathematical finance and economics. Of course neither of these lists is exhaustive.

We hope that *Logic and Analysis* will play a part in encouraging and stimulating further advances in this area and will thereby contribute to maintaining the essential unity of mathematics.

Nigel Cutland
on behalf of the Editorial Board