Selection principles and omission of intervals

Boaz Tsaban

tsaban@math.biu.ac.il

I will provide an overview of *omission of intervals*, a method that I developed for constructing subsets of the real line with extraordinary combinatorial properties, and answering some classic questions. These questions are best viewed in the unified framework of Selection Principles, a central topic in general and set theoretic topology (with applications that go far beyond my talk).

Additional mathematicians have, recently, used this method to obtain new insights on the real line, and settled some of the oldest and most important problems in the realm of Selection Principles. I will mention some of these breakthroughs.