

Paul Eldowney (University of Notre Dame): "Toward Model-theoretic Logicism"

Zilber's conjecture has played an important role in the development of model theory over the past 30 years. There is a popular sentiment among logicians and mathematicians that the conjecture provides a sense in which mathematical structures can be recovered from logical resources alone. In support of this sentiment, I shall argue that the concepts of strong minimality and non-modularity, which figures centrally in Zilber's conjecture, are logical in nature. This is philosophically significant because it lays the groundwork for a new approach to establishing logicism, i.e., the thesis that some substantial parts of mathematics are reducible to logic.