

1135-03-194

**Keita Yokoyama\*** (y-keita@jaist.ac.jp). *Ramsey's theorem in arithmetic.*

Calibrating the strength of various combinatorial principles is one of the important topics in the study of reverse mathematics. Especially, deciding the strength of Ramsey's theorem for pairs is hard and it is precisely studied from the viewpoints of both of computability theory and proof theory. In this talk, I will focus on the first-order consequences of infinite Ramsey's theorem and overview the recent developments. (Received September 22, 2017)