

1138-05-122

**Zi-Xia Song\*** ([zixia.song@ucf.edu](mailto:zixia.song@ucf.edu)), Department of Mathematics, University of Central Florida, Orlando, FL 32816. *Recent Results on Gallai-Ramsey Numbers of Cycles.*

We study Ramsey-type problems in Gallai-colorings. Given a graph  $G$  and an integer  $k \geq 1$ , the Gallai-Ramsey number  $gr_k(K_3, G)$  is the least positive integer  $n$  such that every  $k$ -coloring of the edges of the complete graph on  $n$  vertices contains either a rainbow triangle (that is, a triangle with all its edges colored differently) or a monochromatic copy of  $G$ . It turns out that  $gr_k(K_3, G)$  behaves more nicely than the classical Ramsey number  $r_k(G)$ . However, finding exact values of  $gr_k(K_3, G)$  is far from trivial. In this talk, we survey recent results on Gallai-Ramsey numbers of cycles. (Received February 06, 2018)