

# THE 4-COLOR RAMSEY MULTIPLICITY OF TRIANGLES

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In 1959 Goodman established that asymptotically, in any two-edge-coloring of the complete graph, at least a quarter of all triangles must be monochromatic. This initiated the much studied Ramsey Multiplicity Problem and was extended in 2013 by Cummings et al. to three-edge-colorings. In this talk, we will extend this results to triangles in four-edge-colorings and explore the computational challenges of scaling up flag-algebra based proofs.

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