

Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-05-604 **Nadia Heninger*** (nadiyah@uclink.berkeley.edu), **Annalies Vuong** and **Anne Shiu**. *Classes of graphs with bounded integrity*. Preliminary report.

Graph integrity was introduced to provide a measure of the vulnerability of a communication network to attack. We prove an upper bound of $O(\sqrt{n})$ for the integrity of graphs with bounded tree-width, and an upper bound of $O(n^{2/3})$ for the integrity of planar graphs and graphs with an excluded minor. (Received September 24, 2004)