Burling Graphs

Nicolas Trotignon, LIP, ENS Lyon, nicolas.trotignon@ens-lyon.fr Pegah Pournajafi, LIP, ENS Lyon, pegah.pournajafi@ens-lyon.fr

The class of Burling graphs is a triangle-free class of graphs with unbounded chromatic number. This class is interesting from different aspects. For example, they provide some results on χ -boundedness problems. Also, they arise as interesting examples of intersection graphs of geometric objects. In this talk, we investigate some of the results about this class of graphs, mostly from [1], [2], and a work in preparation.

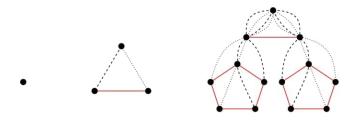


FIGURE 1 – The first three graphs in the Burling sequence

Références

- [1] Pournajafi, Pegah, and Nicolas Trotignon. "Burling graphs revisited—Part 1 New characterizations." arXiv preprint arXiv:2104.07001 (2021).
- [2] Pournajafi, Pegah, and Nicolas Trotignon. "Burling graphs revisited Part 2: Structure." arXiv preprint arXiv:2106.16089 (2021).