

Connectivity of cubical polytopes, Journal of Combinatorial Theory

Journal Article

[Dr Hoa Bui](#)

Authors: Hoa Bui, Guillermo Pineda-Villavicencio, Julien Ugon

2019-08-06

Publication

Journal of Combinatorial Theory, Series A

Volume 169, January 2020, 105126

The Journal of Combinatorial Theory publishes original mathematical research concerned with theoretical and practical aspects of combinatorics in all branches of science.

Quality Indicators

Peer Reviewed

Q1 Journal as rated in SJR

Relevance to the Centre

In this research, I focus on the graphs of convex polytopes - fundamental geometric objects in combinatorics optimisation. The structures of their graphs play a key role in the simplex method, which is the most fundamental search technique on polytopes for solving linear programming. Therefore, studying their combinatorial properties is fundamental. In this research, we deal with the connectivity of the graphs of cubical polytopes. (see my blog in Internal News Blog for further information)

DOI: [10.1016/j.jcta.2019.105126](https://doi.org/10.1016/j.jcta.2019.105126)

[Link to Publication](#)