Solving the maximum independant set problem with Tropical tensor networks

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ABSTRACT

Solving the maximum independent set size problem: the maximum independent set size, the degeneracy, the optimal configuration and the equivalence between different graphs.

1 Tools

OMEinsum a package for einsum

https://github.com/under-Peter/OMEinsum.jl

TropicalGEMM a package for efficient tropical matrix multiplication (compatible with OMEinsum)

https://github.com/TensorBFS/TropicalGEMM.jl

TropicalNumbers a package providing tropical number types and tropical algebra, one o the dependency of TropicalGEMM

https://github.com/TensorBFS/TropicalNumbers.jl

REFERENCES