

JAN KRATOCHVIL

DOES THERE EXIST A FUNCTION $f(k)$
SUCH THAT

$\delta(G) \geq f(k) \Rightarrow V(G)$ CAN BE PARTITIONED
OR $\kappa(G) \geq f(k) \Rightarrow$ INTO STARS WITH
 $\geq k$ RAYS EACH ?

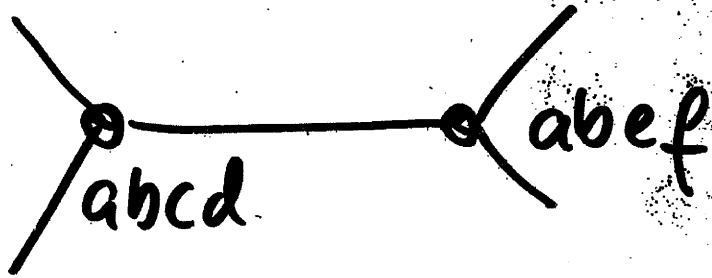
VERTEX CONNECTIVITY

JAN KRATOCHVIL (+ ZS. TUŽA, M. VOIGT 1998)

ARE PLANAR GRAPHS $(4, 1, 2)$ -CHOOSEABLE?

LIST SIZE 4

$uv \in E \Rightarrow |L(u) \cap L(v)| \leq 2$

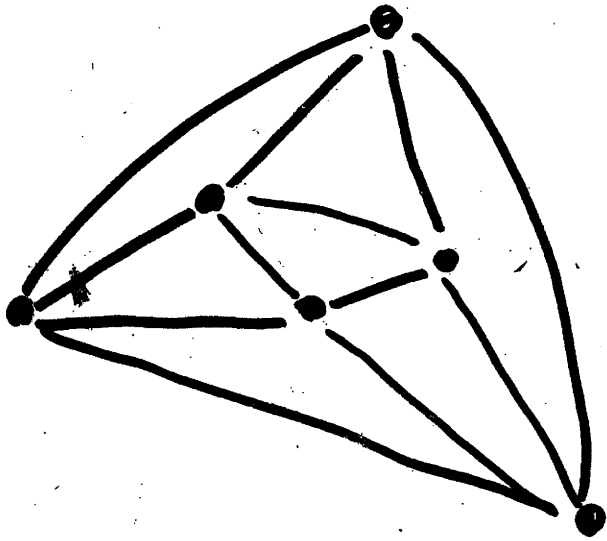


1
3

YES

NO

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GIVEN A HAMILTON CYCLE
IN A PLANAR TRIANGULATION,
HOW DIFFICULT IS TO FIND
ANOTHER ONE?

POLYNOMIAL?

AS DIFFICULT AS IN A CUBIC
GRAPH?