

PARTITIONING THE EDGES OF A PLANAR GRAPH INTO THOSE OF A FOREST AND A GRAPH OF LIMITED VERTEX DEGREE

Q RAISED BY

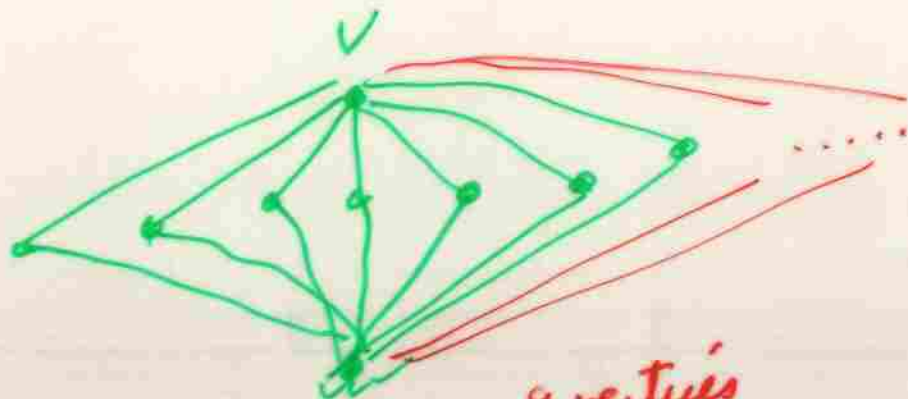
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My aim -

to acquaint you with some
nice open problems,
will prove the result to give ~~you~~ ^{of problem}
work by me with help from several
students, including

David Vincent
Pavel PyLauski
Jonathan Comstock
Bridget Turner

There is no general limit ^{fixed} on the maximum vertex degree of edges that must be removed to make a planar graph into a forest:



This graph has 9 vertices
 7 faces.
 in general N vertices + $N - 2$ faces.

You have to remove 6 or in general $N - 3$ edges to get a tree and one of v and w then has to get degree at least $\frac{N-3}{2}$.

However if we restrict the girth ^{to 5} to be ≥ 5 , there is a bound,