

Twentieth lecture

● MORE GRAPH THEORY

Leftovers:

More properties of trees

Spanning trees

(Vertex) colouring of graphs

The chromatic number $\chi(G)$

A greedy algorithm

Chromatic polynomials $P_G(\lambda)$

$$P_G(\lambda) = P_{G-e}(\lambda) - P_{G/e}(\lambda)$$

Planar graphs

Dual graphs

Euler's polyhedron formula

(K_5 and $K_{3,3}$ are non-planar,)

(Kuratowski's and Wagner's theorems)

(The four-colour theorem)