Covering planar graphs with forests

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Abstract. We study the problem of covering graphs with trees and a graph of bounded maximum degree. By a classical theorem of Nash-Williams, every planar graph can be covered by three trees. We show that every planar graph can be covered by three forests, and the maximum degree of the one of forests is at most 8. Stronger results are obtained for some special classes of planar graphs. This is joint work with M. Kochol, A. Pluhár, and X. Yu.