1017-55-52   **Laurentiu G Maxim*** (`lmaxim@math.uic.edu`), 851 South Morgan Street, Chicago, IL 60607, and **Constance Leidy**. *Higher-order Alexander invariants of plane curve complements.*

Higher-order degrees of a plane affine curve are numerical invariants of the fundamental group of the curve complement, 'measuring' the sizes of quotients of successive terms in the rational derived series of the group. For curves in general position at infinity, we provide an upper bound on the higher-order degrees of the curve in terms of the corresponding local invariants at the singular points, and a uniform upper bound depending only on the degree of the curve. This provides new obstructions on the type of groups that can arise as fundamental groups of complements to affine curves. This is joint work with C. Leidy (U. Penn.) (Received February 07, 2006)