1009-52-174   **Raghavan S Dhandapani*** (`raghavan@cs.nyu.edu`), Rm 417, Warren Weaver Hall, 251 Mercer Street, New York, NY 10012, and **Jacob Eli Goodman**, **Andreas Holmsen** and **Richard Pollack**. *Interval Sequences and the Combinatorial Encoding of Planar Families of Convex Sets.*

Extending the notion of allowable sequences for planar point sets, J.E. Goodman and R. Pollack recently introduced a combinatorial encoding of families of pairwise disjoint convex sets in the plane.

We further extend this notion to the case of families of sets not necessarily in general position. We discuss several realizability questions and enumerate different combinatorial properties captured by this encoding. We also discuss a Helly type theorem for this encoding and provide a simple proof of a generalization of a result of Tverberg. Finally, we discuss some algorithmic issues and mention several open problems in this area. (Received August 15, 2005)