## 1047-05-239 Maria Chudnovsky\* (mchudnov@columbia.edu) and Paul Seymour. Rao's degree sequence conjecture and well-quasi-ordering tournaments by immersion.

In the 1980's Rao conjectured that in every infinite set of degree sequences of graphs, there are two degree sequences with graphs one of which is an induced subgraph of another. Recently we proved this conjecture, and we will sketch the main ideas of proof. It turns out that Rao's conjecture is related to the problem of ordering certain families of digraphs by immersion. In particular, we were able to show that the set of tournaments is well-quasi-ordered by immersion. (Received January 29, 2009)