Michelle Delcourt* (delcour2@illinois.edu), 1409 W Green St., Urbana, IL 61801, and Luke Postle. Claw decompositions of random 4-regular graphs.

In 2005, Barat and Thomassen conjectured that the edges of every planar 4-regular 4-edge-connected graph can be decomposed into claws; shortly afterwards, Lai constructed a counterexample to this conjecture. Using the small subgraph conditioning method of Wormald, we show that a.a.s. a random 4-regular graph has such a claw decomposition. This is joint work with Luke Postle. (Received February 23, 2016)