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*Local choosability of planar graphs*

In 1994, Thomassen famously proved that every planar graph is 5-choosable. Later, he proved that every planar graph of girth at least five is 3-choosable. In this talk, I will introduce the concept of a local girth list assignment: a list assignment wherein the list size of each vertex depends not on the girth of the graph, but only on the length of the shortest cycle in which the vertex itself is contained. I will present a local choosability theorem for planar graphs, unifying the two theorems of Thomassen mentioned above. (Joint work with Luke Postle.)