1167-05-13James Davies* (jgdavies@uwaterloo.ca), Florian Pfender and Carsten Thomassen.Edge-maximal graphs on surfaces.

It is straightforward to show that, with the exception of small complete graphs, every edge-maximal planar graph triangulates the plane. This is not the case in general for graphs that are edge-maximal with respect to being embeddable on other surfaces. We investigate the existence of non-complete edge-maximal graphs on surfaces that are not triangulations. Joint work with Florian Pfender and Carsten Thomassen. (Received January 16, 2021)