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Holley Friedlander, Elena Fuchs, Piper H, Catherine Hsu, Katherine Sanden, Damaris Schindler and Katherine E Stange* (kstange@math.colorado.edu). *Primes in Apollonian circle packings*. Preliminary report.

An Apollonian circle packing is a fractal arrangement of circles with disjoint interiors, generated by a simple geometric recursion. It is often the case that the curvatures of the circles are all integers, and it is natural to ask about this collection. It is conjectured that, subject to a congruence obstruction, the collection contains every sufficiently large admissible integer. We extend such investigations to certain subsets controlled by the circles of prime curvature. (Received September 17, 2019)