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**Tomas Skacel\*** ([skacel.t@northeastern.edu](mailto:skacel.t@northeastern.edu)). *Snub-Wythoffian Skeletal Polyhedra - Preliminary Report*. Preliminary report.

Skeletal polyhedra in ordinary Euclidean 3-space are discrete structures consisting of finite (planar or skew) or infinite (helical or zigzag) polygons as faces, with two faces on each edge and a circular vertex-figure at each vertex. This talk will present a new construction, called the snub-Wythoffian construction, which when applied to the 48 regular skeletal polyhedra (Grünbaum–Dress polyhedra) in ordinary space, or to the infinite class of chiral polyhedra, produces highly rotationally symmetric skeletal polyhedra. The resulting polyhedra, called snub-Wythoffians, are vertex transitive and often form new uniform polyhedra. The snub-Wythoffians of the platonic solids and the Kepler-Poinsot polyhedra form well known snub polyhedra, and the snub-Wythoffians of the remaining regular polyhedra can be viewed as new snub polyhedra. The talk will discuss the blueprint for the construction and provide examples of snub-Wythoffians of both regular and chiral polyhedra. (Received January 23, 2022)