

1139-52-378

**Abigail Williams\***, abigail.williams13@gmail.com. *Uniform polyhedra with nonplanar faces.*

In this talk, we will discuss a method for generating uniform polyhedra with nonplanar faces. Uniform polyhedra are vertex transitive under one of the symmetry groups of the regular polyhedra and, additionally, have regular polygons as faces. We consider polygons as connected edge sets without requiring a membrane spanning those edges. This allows us to examine polygons as being either planar or nonplanar. To define regularity of a nonplanar polygons, we exploit their relationship with prisms and antiprisms. This definition is the guiding principle of our method of generating uniform polyhedra with nonplanar faces. (Received February 16, 2018)