1163-51-1056Anthony Sanchez* (asanch33@uw.edu). Translation covers of platonic solids and their
monodromy groups. Preliminary report.

Platonic solids have been studied for thousands of years. By unfolding a platonic solid we can associate to it a translation surface. Interesting information about the underlying platonic solid can be discovered in the cover where more (dynamical and geometric) structure is present. The translation covers we consider have a large group of symmetries that leave the global composition of the surface unchanged. However, the local structure of paths on the surface is often sensitive to these symmetries. The Kontsevich-Zorich mondromy group keeps track of this sensitivity.

In joint work with D. Lee, we study the mondromy groups of translation covers of some platonic solids. (Received September 14, 2020)