1125-14-493 **S. Allen Broughton*** (brought@rose-hulman.edu), **Antonio F. Costa** and **Milagros Izquierda**. *Subgroups of the Mapping Class Group Corresponding to 1-dimensional Strata in the Branch Locus of Moduli Space.* Preliminary report.

The branch locus $\mathcal{B}_\sigma \subset \mathcal{M}_\sigma$, the moduli space of surfaces of genus σ, is the subspace of surfaces with a non-trivial automorphism group. The branch locus admits a stratification by finitely many, irreducible, complex algebraic varieties, corresponding to surfaces whose automorphism groups have topologically equivalent actions. In turn, each stratum determines a conjugacy classes of finite subgroups of the mapping class of genus σ. The correspondence between strata and conjugacy classes of finite subgroups is not 1-1, but is fairly close to 1-1. The strata of dimension 0 correspond to quasiplatonic surfaces, which are very well studied. In this talk we take the next step and study the subgroups corresponding to strata of dimension 1, where the quotient surface $S/\mathrm{Aut}(S)$ is either is a sphere with four branch points or a torus with one branch point. We discuss the topology of these strata in terms of the structure of the group. (Received September 04, 2016)