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S. Allen Broughton*, 6 Lenox Dr, Shrewsbury, MA 01545-3049, and **Eduardo Brandani da Silva**. *Triangulations of unoriented surfaces and quantum coding theory*. Preliminary report.

We consider the question of when an unorientable surface without boundary can be tiled by an (l,m,n) triangle. We require that the automorphism group of the surface act transitively on the tiles, giving a highly symmetric triangulation of the surface. We use the well known theory and classification of low genus, quasiplatonic surfaces and symmetries of Riemann surfaces to outline a classification algorithm that only uses finite group calculations. We report progress on carrying out this program for low genus surfaces and present some examples of families of such surfaces.

The triangulations of the surfaces can be used to aid quantum coding theory. We discuss this application briefly though the major focus is on the tilings. (Received January 17, 2022)