

Fine curve graphs and the Gromov hyperbolicity for nonorientable surfaces

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Abstract: A fine curve graph defined by Bowden, Hensel, and Webb is a new curve graph consists of the actual essential simple closed curves on a surface. They proved that the fine curve graph of any closed orientable surface of genus $g \geq 1$ is uniformly hyperbolic in the sense of Gromov.

In this talk, we introduce the framework by Bowden, Hensel, and Webb for orientable surfaces, and explain how to generalize their result to closed nonorientable surfaces. Especially we would like to talk about differences from the case of orientable surfaces.

This is a joint work with Mitsuaki Kimura.