

1155-57-360

**Alexander James Rasmussen\***, 503 Orange Street, New Haven, CT 06511. *Nonseparating curve graphs and infinite type surfaces.*

The curve graph of a finite type surface is a crucial tool for understanding the algebra and geometry of the corresponding mapping class group. Recently, researchers have studied mapping class groups of infinite type surfaces using related graphs such as the ray graph and the nonseparating curve graph. In this talk I will discuss the combinatorial machinery of bicorns, first introduced by Przytycki-Sisto, and their applications to the geometry of the nonseparating curve graphs. These applications include results on hyperbolicity, quasiconvex subgraphs, and boundaries. (Received January 18, 2020)