

1115-57-169

Federico Ardila, Megan Owen and Seth Sullivan* (smsulli2@ncsu.edu). *Computing geodesics in CAT(0) cube complexes.*

We describe an algorithm to compute the geodesics in an arbitrary CAT(0) cubical complex. A key intermediate tool is the Owen-Provan algorithm for computing geodesics in CAT(0) orthant complexes. We will also discuss issues of algebraic complexity that arise in these computations. (Received September 15, 2015)