

1146-54-121

Tomohiro Fukaya, Shin-ichi Oguni and Takamitsu Yamauchi*

(yamauchi.takamitsu.ts@ehime-u.ac.jp). *Coarse compactifications and controlled products.*

By a coarse compactification we mean a metrizable compactification of a proper metric space that is a quotient of the Higson compactification. A fundamental example of a coarse compactification is the Gromov compactification of a hyperbolic geodesic space induced by its Gromov product. In this talk, we introduce a generalization of a Gromov product, called a controlled product, and show that, for a given proper metric space, there is a bijective correspondence between the set of all coarse equivalence classes of controlled products and the set of all equivalence classes of coarse compactifications.

This is joint work with Tomohiro Fukaya and Shin-ichi Oguni. (Received January 14, 2019)