1068-57-191 Matt T. Clay, Christopher J. Leininger and Johanna Mangahas\*

(mangahas@math.brown.edu). The geometry of right angled Artin subgroups of mapping class groups.

We describe sufficient conditions which guarantee that a finite set of mapping classes generate a right-angled Artin group quasi-isometrically embedded in the mapping class group. Moreover, under these conditions, the orbit map to Teichmüller space is a quasi-isometric embedding for both of the standard metrics. As a consequence, we produce infinitely many genus h surfaces (for any h at least 2) in the moduli space of genus g surfaces (for any g at least 3) for which the universal covers are quasi-isometrically embedded in the Teichmüller space. (Received January 18, 2011)