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Linköping, Ostergötla, Sweden. *Uniparametric families of compact Riemann surfaces with large symmetry.*

By the work of Hurwitz we know that a compact Riemann surface of genus  $g$  has at most  $84(g - 1)$  automorphisms. Finding surfaces with large symmetry is not easy. In 1968 Accola and Maclachlan found isolated surfaces, in all genera, having  $8g + 8$  automorphisms, they describe the symmetry of the surface; i.e. the unique conjugacy class of a finite subgroup of the mapping class group of order  $8g + 8$ . Using Riemann-Hurwitz one gets that the maximal number of automorphisms of a uniparametric family of compact Riemann surfaces, in all genera, is  $4g + 4$ . Here we determine and describe the conjugacy classes of subgroups with order  $4g$  of the mapping class group. As in Accola-Maclachlan case the symmetry of surfaces with  $4g$  automorphisms is rigid. (Received August 24, 2016)