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Clifford J Earle* (cliff@math.cornell.edu), Department of Mathematics, Cornell University, Malott Hall, Ithaca, NY 14853-4201. *Some families of special compact Riemann surfaces of genus two.*

It has been known for many years that there are compact Riemann surfaces of genus two whose Jacobi varieties are isomorphic (as complex manifolds) to the product of two elliptic curves. These surfaces occur in families of complex dimension one that can be regarded either as families of period matrices or as closed submanifolds of Teichmueller space. The families of period matrices are easy to describe, but little is known about the corresponding submanifolds of Teichmueller space.

In one example, the submanifold is a Teichmueller disk that has a large automorphism group. It would be very interesting to know whether that case is typical. (Received February 22, 2005)