

Meeting: 1006, Lubbock, Texas, SS 5A, Special Session on Recent Advances in Complex Function Theory

1006-30-220 **David Radnell** (radnell@mpim-bonn.mpg.de), Max Planck Institute for Mathematics, P.O.Box: 7280, D-53072 Bonn, Germany, and **Eric Schippers*** (Eric_Schippers@Manitoba.CA), Department of Mathematics, Machray Hall, University of Manitoba, Winnipeg, Manitoba R3T 2N2, Canada. *Conformal field theory and the universal Teichmueller space.*

In two-dimensional conformal field theory the motion of bosonic strings is modelled by Riemann surfaces which are ‘rigged’ with analytical parametrizations of their boundary curves. One problem in the construction of a rigorous model is to provide a moduli space of rigged Riemann surfaces, and show that the operation of sewing two surfaces according to the boundary data is holomorphic. This was accomplished by D. Radnell in the analytic case. By considering Riemann surfaces rigged instead with quasisymmetric boundary parametrizations, we show that the natural Teichmueller space of rigged Riemann surfaces sits inside the universal Teichmueller space. In particular holomorphicity of sewing follows easily. (Received February 15, 2005)