

Degenerating Harmonic Maps and Frontiers of Spaces of Representations

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We discuss partial progress in a program for degeneration in the Teichmüller component of surface group representations in $\mathrm{PSL}(3, \mathbb{R})$. We discuss analogous but more complete progress in the work of Jorge Acosta on limits of cyclicopers: he finds expressions for the asymptotic monodromy of this class ofopers in terms of the coefficients of the oper, a natural map to the relevant symmetric space and the projective limiting of that map to a sub-building of an asymptotic cone of this symmetric space. We model the programs on the case of degenerating harmonic maps for $\mathrm{PSL}(3, \mathbb{R})$ representations, and we aim to focus on the emergence and role of Stokes data. Joint work with David Dumas and John Loftin.