

Boundary and bulk local operators in conformal field theory and SLE

John Cardy
University of Oxford

Conformal field theory implies that to most local boundary operators there corresponds a holomorphic bulk operator with the same scaling dimension. In some cases these may presumably be identified as the scaling limit of discretely holomorphic lattice observables. I argue that they may also be viewed as the limits of boundary operators attached to a vanishingly small disc (a point of view that also has an SLE interpretation), and address the issue of whether their bulk correlators then satisfy null-state differential equations.