



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Universal Correlators from the Holomorphic Bootstrap

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(Duration and Location are subject to irreducible jitter)

We elaborate and extend the method of Wronskian differential equations for conformal blocks to compute four-point correlation functions on the plane for classes of primary fields in rational (and possibly more general) conformal field theories. We apply this technique to compute correlators for the WZW models corresponding to the Deligne-Cvitanovic exceptional series of Lie algebras. The application turns out to be subtle in certain cases where there are multiple decoupled primaries. The power of this approach is demonstrated by applying it to compute four-point functions for the Baby Monster CFT, which does not belong to any minimal series.