Meeting: 1003, Atlanta, Georgia, SS 14A, AMS Special Session on D-Modules, I

1003-14-1099

Charles F Doran* (doran@math.washington.edu), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195-4350, and Shinobu Hosono. GKZ-Systems and

Quantum Cohomology D-Modules. Preliminary report.

The structure of GKZ-hypergeometric systems describing the Gauss-Manin connection for families Calabi-Yau hypersurfaces in Gorenstein toric Fano varieties is related to that of the quantum cohomology D-modules for the toric ambient space via Laplace transform. (Received October 04, 2004)