

n -POINT SPHERICAL FUNCTIONS AND REFLECTION EQUATIONS

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ABSTRACT

I will discuss a special class of vector valued spherical functions on real reductive groups, called n -point spherical functions. They are asymptotic remnants of n -point correlation functions for WZW conformal field theory. I will explain that the n -point spherical functions are solutions of a consistent system of first order differential equations. The building blocks of these differential equations are expressed in terms of solutions of dynamical Yang-Baxter and reflection equations. Partly based on joint work with Nicolai Reshetikhin.

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