



MAFIA - the seminar you can't refuse

Yangian symmetric correlators—generation by R operator action and by convolution

prof. Roland Kirschner

Universität Leipzig

31. 3. 2015 at 11:30 in T115/C

Fakulta jaderná a fyzikálně inženýrská ČVUT
Trojanova 13, 12000 Praha

Abstract: Yangian symmetric correlators are functions of N points in an n -dimensional space obeying an eigenvalue relation with the monodromy operator related to a $\mathfrak{gl}(n)$ spin chain of N sites. Imposing a regularity condition and specifying the value of n and of the spectral parameters results in contributions to perturbative Yang-Mills scattering amplitudes. Symmetric correlators can be generated by actions with Yang-Baxter R operator or by convolution integrals. They are composed of contributions distinguished by the additional symmetry with respect to linear transformations acting on a subset of points.