

SEMPARIS – Séminaires en région parisienne

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Strings, integrability and beyond

Jeudi 25 Avril 2019, 11 :30

IPHT, Salle Itzyckson

Domaines : hep-th

Titre : *Separated variables and wave functions for rational $GL(N)$ spin chains*

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Résumé : *We present a basis in which wave functions of integrable XXX spin chain factorise into a product of Slater determinants of Baxter Q -functions. We furthermore show that this basis is formed by eigenvectors of the $B[\text{good}]$ -operator and it is naturally labelled by Gelfand-Tsetlin patterns. The discussion is valid for spin chains in any rectangular representation and arbitrary rank of the $GL(N)$ symmetry group. For symmetric powers of the defining representation, one also observes a corollary that $B[\text{good}]$ -operator acting on a suitably chosen vacuum constructs the eigenstates of the Bethe algebra.*
