## SEMPARIS – Séminaires en région parisienne

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## **Journal Club**

Vendredi 20 Octobre 2017, 11:00 IPHT, Salle Claude Itzykson, Bât. 774

Domaines: physics

Titre: Scalar products of Bethe vectors in the algebraic Bethe ansatz

Orateur : Nikita Slavnov ( Steklov Mathematical Inst. of Russian Academy of Sciences, Moscow )

Résumé : "Integrability meeting ENS/IPhT"

We consider a problem of Bethe vectors scalar products of the models solvable by the (nested) algebraic Bethe ansatz. For the models with gl(2) symmetry or its q-deformation, the scalar products can be calculated straightforwardly via the standard arguments of the algebraic Bethe ansatz. However, for the models with higher rank symmetry, the technical complexity of such a calculation increases immensely. We suggest a new method based on the coproduct properties of the Bethe vectors. We illustrate this method by the example of the scalar products in the gl(2) based models.

(IPhT organizer : Ivan Kostov)