

Séminaire de physique mathématique

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(voir dans annonce)

The structure of the representations of the affine Temperley-Lieb algebras on the periodic XXZ chain

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The affine Temperley-Lieb algebras $aTLN(\beta)$ are a family of infinite dimensional algebras generalizing the well-known Temperley-Lieb algebras $TLN(\beta)$. They play, for the periodic XXZ chain, the role played by the original Temperley-Lieb algebra for the open XXZ chain. Their representation theory is much richer than that of the original TL family and admits a lot of similarities with the representation theory of the Virasoro algebra Vir . In particular, we will show in this talk that the representations of $aTLN(\beta)$ on the periodic XXZ chains admits a structure akin that of the so-called Feigin-Fuchs Vir -modules. To do this, we will highlight the link between these representations and other canonical modules over $aTLN(\beta)$ (the standard modules) while building up on the well-known quantum Schur-Weyl duality between $TLN(\beta)$ and U_{qsl_2} .

The seminar is online only.

Internet link to be collected from the Organizer: vincent.pasquier@ipht.fr
