SEMINAIRE DE PHYSIQUE THEORIQUE

Le Jeudi 22 septembre à 14h00
Salle 1180 (Bât E2) (Tours)

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Elliptic algebra $U_{q,p}(g)$: Recent advance and future project for $g=(\hat{sl}(M|N))$

Résumé:

We introduce the elliptic superalgebra $U_{q,p}(\hat{sl}(M|N))$ as one parameter deformation of the quantum superalgebra $U_q(\widehat{sl}(M|N))$. In the case of level $k \neq 0, -N+1$, we give the free field realization of the elliptic superalgebra $U_{q,p}(\hat{sl}(N|1))$ and its screening current that commute with $U_{q,p}(\hat{sl}(N|1))$ modulo total difference. We demonstarate future research projects for the elliptic superalgebra $U_{q,p}(\hat{sl}(M|N))$, by showing the results (commuting operator, vertex operator, boundary problem) for non-super algebra $U_{q,p}(\hat{sl}(N))$.