Sruf

Almost formality of spin mfds - Van Le

Def. A Poincaré algebra of deg n is a f.m. dim alg graded alg $H^\bullet = \bigoplus_{i=1}^{n} H_i$

Multi centered higher spin solutions

- 3d gravity as toy model
- topological
- tensionless limit of $AdS_3 \times S^3 \times M_4$ strings

- Chern-Simons formulation vs metric one
  → quantum equivalence unclear
  → $SL(2,\mathbb{R})$, 2 copies (CS fields $A, \bar{A}$)
- higher-spin: pick $SL(N,\mathbb{R}) \times SL(N,\mathbb{R})$
  + specify a grav sector by picking an embedding of $SL(2,\mathbb{R}) \times SL(2,\mathbb{R})$ into it
  → or $\mathcal{U}(sl_N) / \langle C_2 - \lambda(\lambda-1) \rangle$

- in (g, x_+, x_-) we can describe asymptotic AdS_3 if $A_-|_\partial = 0$, $\bar{A}_+|_\partial = 0$

W_n conformal blocks - G. Vasilakis
- search for backreacted multi-centered solns.

Superintegrability and time-dependent integrals - G. Kübü