

1163-81-256

Hao Li* (hli29@albany.edu), 1400 Washington Avenue, Albany, NY 12222, and **Antun Milas**.
Jet schemes, Quantum dilogarithm and Feigin-Stoyanovsky's principal subspaces. Preliminary report.

We analyze the structure of the infinite jet algebra, or arc algebra, associated to level one Feigin-Stoyanovsky's principal subspaces. For A -series, we show that their Hilbert series can be computed either using the quantum dilogarithm or as certain generating functions over finite-dimensional representations of A -type quivers. In particular, we obtain new fermionic character formulas for level one A -type principal subspaces, which implies that they are classically free. (Received August 30, 2020)