1167-17-118   **Gail Letzter***, gletzter@verizon.net, and **Siddhartha Sahi** and **Hadi Salmasian**. *Quantum Weyl Algebras for Homogeneous Spaces.* Preliminary report.

We give a brief overview of quantum Weyl algebras and explain how many of these algebras can be constructed using twisted tensor products defined via R-matrices. Building on this approach, quantum analogs of Weyl algebras are formed for several homogenous spaces using both R-matrices and solutions to reflection equations. We show how these new quantum Weyl algebras interact nicely with related quantized enveloping algebras in terms of module structures and embeddings. (Received March 01, 2021)