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[Q,R]=0 and Verlinde Series

Let G be a compact, connected, simply connected Lie group, and let LG denote the loop group. There is a one-one correspondence between proper Hamiltonian LG-spaces and compact quasi-Hamiltonian G-spaces. We prove a 'norm-square localization' formula for the quantization of a quasi-Hamiltonian G-space, with terms indexed by the components of the critical set of the norm-square of the moment map of the corresponding LG-space. An important application is to give a new proof of a quantization-commutes-with-reduction theorem. This is joint work with E. Meinrenken.