1102-20-173 **Terrell L. Hodge*** (terrell.hodge@wmich.edu), Department of Mathematics, Western Michigan University, Kalamazoo, MI 49008, **Paramasamy Karappuchamy** (paramasamy.karappuchamy@utoledo.edu), Department of Mathematics, University of Toledo, Toledo, OH 43606, and **Leonard L. Scott** (lls2l@virginia.edu), Department of Mathematics, University of Virginia, Charlottesville, VA 22903. *Truncation and the Induction Theorem.* Preliminary report.

A key result in a 2004 paper by S. Arkhipov, R. Bezrukavnikov, and V. Ginzburg compares the bounded derived category $D^b(block(\mathbb{U}))$ of finite dimensional modules for the principal block of a Lusztig quantum algebra $\mathbb{U}$ at a root of unity with a special full subcategory $D_{triv}(\mathbb{B})$ of the bounded derived category of integrable type 1 modules for a Borel part $\mathbb{B} \subset \mathbb{U}$. Specifically, the right derived functor of induction yields a category equivalence $\mathrm{RInd}_{\mathbb{B}}^{\mathbb{U}} : D_{triv}(\mathbb{B}) \xrightarrow{\sim} D^b(block(\mathbb{U}))$. An analog of this *Induction Theorem* holds for positive characteristic representations of algebraic groups:$\mathrm{RInd}_B^G : D_{triv}(B) \xrightarrow{\sim} D^b(block(G))$, relating an analog of $D_{triv}(\mathbb{B})$, for B a Borel subgroup of a connected, semisimple simply connected algebraic group G, and the bounded derived category of the principal block of finite dimensional rational G-modules. We prove this equivalence behaves well with respect to certain weight poset 'truncations', using van der Kallen's *excellent order*. Consequently, this equivalence can be reformulated in terms of derived categories of finite dimensional algebras. (Received July 28, 2014)