962-14-983 **Adam Nyman*** (nyman@math.washington.edu), Adam Nyman, Department of Mathematics, University of Washington, Seattle, WA 98195. *Points on Quantum Projectivizations.*

The use of geometric invariants has recently played an important role in the solution of classification problems in noncommutative ring theory. We construct geometric invariants of noncommutative projectivizataions, a significant class of examples in noncommutative algebraic geometry. More precisely, if S is an affine, noetherian scheme, X is a separated, noetherian S-scheme, $\mathcal{E}$ is a coherent $\mathcal{O}_X$-bimodule and $\mathcal{I} \subset T(\mathcal{E})$ is a graded ideal then we develop a compatibility theory on adjoint squares in order to construct the functor Γ_n of flat families of truncated $T(\mathcal{E})/\mathcal{I}$-point modules of length $n+1$. For $n \geq 1$ we represent Γ_n as a closed subscheme of $\mathbb{P}_{X^2}(\mathcal{E}^{\otimes n})$. The representing scheme is defined in terms of both $\mathcal{I}_n$ and the bimodule Segre embedding, which we construct. When $\mathsf{Proj}T(\mathcal{E})/\mathcal{I}$ is a quantum ruled surface, we use the geometry of the Γ_n's to show that the point modules over $T(\mathcal{E})/\mathcal{I}$ are parameterized by the closed points of $\mathbb{P}_{X^2}(\mathcal{E})$. (Received September 29, 2000)