

Graded manifolds naturally arise in the context of Batalin-Vilkovisky quantization as one introduces fields of non-trivial ghost degrees. We study the structures tied to the dynamics and gauge symmetry of AKSZ models involving the classical master action or the antibracket on symplectic differential non-negatively graded manifolds (NQP manifolds) in the language of sheaves of graded-commutative algebras. We review the one-to-one correspondence between isomorphism classes of Courant algebroids and NQP manifolds of degree 2. Applying the construction of Lagrangian correspondences in the spirit of Weinstein's symplectic category, we extend the one-to-one correspondence on objects to an equivalence of categories.