1046-19-700 **Seshendra Pallekonda*** (seshendrapallekonda@kings.edu), 133 River st, Admin 418, Wilkes-Barre, PA 18711. *Bounded Category of an Exact Category.*

Quillen's definition of higher K-groups of a ring R led to the idea of viewing algebraic K-theory of the ring R as a connective spectrum. A connective spectrum is one which has no homotopy groups in negative dimensions. Along the ideas of Quillen, the algebraic K-theory could be defined for an arbitrary exact category. But the connective spectra do not capture the negative K-groups. To address this we explain the problem of non-connective delooping. Given an exact category E, find an exact category such that its K-groups are the same as K-groups of E but with a dimension shift up by one. Once this is done, we can define all the other negative K-groups inductively.

In the case of an additive category, Pedersen and Weibel solved the problem of non-connective delooping using bounded category methods which proved to be useful in geometric topology to understand assembly maps. For general exact categories, where the exact sequences are not necessarily split, Schlichting solved the problem of non-connective delooping by algebraic methods. In this work, a possible candidate for the bounded category of an exact category is constructed which shares many properties of the bounded categories of Pedersen-Weibel. (Received September 10, 2008)