

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

## SUBVARIETIES AND DESCENT

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(Oxford)

Jan 25, 2013, 3:00 – 4:00pm  
Math/Computer Science, Room B21  
111 Cummington Street, Boston

**Abstract:** Let  $X$  be a variety and  $Z$  be a subvariety. Can one glue vector bundles on  $X-Z$  with vector bundles on some small neighborhood of  $Z$  to get vector bundles on  $X$ ? We survey two recent results on the process of gluing a vector bundle on the complement of a subvariety with a vector bundle on some 'small' neighborhood of the subvariety. This is joint work. The first project is with J. Block and is about certain gluing dg categories associated to dg algebras. These dg categories can be for instance dg enhancements of the derived category of coherent sheaves. The second project is with M. Temkin and is about gluing categories of coherent sheaves over the category of coherent sheaves on a Berkovich analytic space. I will explain the terminology that I used above during the talk.

See <http://math.bu.edu/research/geom/seminar.html> or contact Si Li [sili@math.bu.edu](mailto:sili@math.bu.edu) for more information.