

Scissors and K-theory

A Lecture by Professor Charles Weibel

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ABSTRACT:

If you draw any polygon on a sheet of paper, you can use scissors to cut it up and rearrange the pieces to get a new polygon. These two polygons are said to be "scissors congruent." Concatenating them gives an addition of polygons up to scissors congruence. We can also subtract them if we use virtual polygons; this is the basic principle of K-theory. (Two polygons with the same area are always scissors congruent!)

Now consider the problem in 3-space, with polyhedra instead of polygons, and study congruence classes of polyhedra. (Ok, use a knife.) Now the problem is to find an invariant other than volume.

WEDNESDAY OCTOBER 30, 2019 HILL 425 AT 7:00 PM

*Pizza and refreshments will be served

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