Infinitesimal Center Problem on zero cycles and the composition conjecture

Abstract:

I will present a joint work with A. Alvarez, J.L. Bravo and C. Christopher.

We study the analogue of the classical infinitesimal center problem in the plane, but for zero cycles. We define the displacement function in this context and prove that it is identically zero if and only if the deformation has a composition factor. That is, we prove that here the composition conjecture is true, in contrast with the tangential center problem on zero cycles. Finally, we give examples of applications of our results.

Zoom link: https://us02web.zoom.us/j/88255165329