



# THE WORLDWIDE CENTER OF MATHEMATICS

## From the Milnor Number to the Characteristic Cycle of the Vanishing Cycles



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**Friday, August 7, 2009**

**Coffee, tea, cookies: 3:30pm**

**Talk: 4-5pm**

**929 Massachusetts Ave., Cambridge, Suite #102**

**Abstract:** The Milnor number is a classic invariant, associated to an isolated hypersurface singularity. There have been many attempts, including our own development of the Lê numbers, to generalize the Milnor number to the case of non-isolated hypersurface singularities. In this talk, we will explain why the characteristic cycle of the vanishing cycles is both an algebraic and topological generalization of the Milnor number, and why it is, perhaps, the best that one can hope for. We will also discuss how to calculate this characteristic cycle.

The Worldwide Center of Mathematics, [www.centerofmath.org](http://www.centerofmath.org), is located midway between Harvard and Central Squares, at 929 Massachusetts Avenue, Cambridge, MA, in Suite #102. Travel to the Center by public transportation is easy via the #1 bus, or by taking the subway (the T) to Central Square, and walking for 10 minutes. Suite #102 is located on floor 01, which is distinct from floor 1.

**All attendees will need to sign a release form, as the lecture will be recorded for distribution on the Web.**