962-14-7   **Mark L. Green*** (`mlg@math.ucla.edu`), Department of Mathematics, University of California Los Angeles, Los Angeles, CA 90095-1555. *New perspectives on algebraic cycles.*

Classically, one of the most beautiful chapters in algebraic geometry is the study of divisors on a compact Riemann surface via the Jacobian variety. When one tries to study codimension 2 (or higher) submanifolds or subvarieties, the situation is much more complex. One very useful approach is via infinitesimal methods, i.e. taking derivatives. I will survey some of the techniques used to do this, some of which lead to interesting problems in commutative algebra. I will also discuss some recent joint work with Phillip Griffiths on the tangent space to algebraic cycles. (Received May 03, 2000)