

Meeting: 998, Houston, Texas, SS 19A, Special Session on Algebraic Geometry

998-14-284 **Pedro L Del Angel*** (luis@cimat.mx), Jalisco s/n, Mineral de Valenciana, 36000 Guanajuato, Guanajuato, Mexico, and **Stefan Müller-Stach**. *Differential Systems associated to families of Algebraic Cycles*. Preliminary report.

We develop a theory of differential systems associated to families of algebraic cycles in higher Chow groups (i.e., motivic cohomology groups) related to Picard–Fuchs type inhomogenous differential equations. Using this we are able to give applications to algebraic cycles by studying the resulting inhomogenous differential equations. (Received March 01, 2004)