1011-58-295 Jeanne Clelland (Jeanne.Clelland@Colorado.EDU), University of Colorado, Department of Mathematics, Campus Box 395, Boulder, CO 80309-0395, Marek Kossowski (kossowsk@math.sc.edu), University of South Carolina, Department of Mathematics, Columbia, SC 29208, and George R Wilkens\* (grw@math.hawaii.edu), University of Hawaii at Manoa, Department of Mathematics, 2565 McCarthy Mall, Honolulu, HI 96822-2273. Singular Normal Forms for Symplectic Monge-Ampere PDE in the Plane.

This talk presents a partial classification for smooth type-changing symplectic Monge-Ampère partial differential equations (PDEs) that possess an infinite set of first-order intermediate PDEs. The normal forms will be quasi-linear evolution equations whose types change from hyperbolic to either parabolic or to zero. The zero points can be viewed as analogous to zero points in ordinary differential equations. At parabolic or zero points, standard existence methods are inapplicable, and intermediate PDEs can be used to establish existence of solutions. (Received August 30, 2005)