Singularities with respect to Mather-Jacobian discrepancies

Shihoko Ishii
University of Tokyo

The Usual discrepancy of canonical divisors is defined for a normal Q-Gorenstein variety and used for classification of singularities from the view point of birational geometry. In the talk I will use Mather-Jacobian discrepancy instead of usual discrepancy and discuss ``canonical'' and ``log-canonical'' singularities with respect to this discrepancy. Our interest is also for non-Q-Gorenstein or even non-normal varieties.