Birational geometry and numerical invariants of algebraic varieties ${\rm V.~Shokurov}$

Some numerical invariants of algebraic varieties which are of crucial interest for birational geometry. These invariants include the minimal log discrepancies (mld's), the log canonical thresholds, the canonical and anticanonical thresholds. Expected properties of these invariants and partial results will be discussed with following applications:

- 1. Log termination.
- 2. Fano inequality.
- 2. Geography of log models.