

# Harvard-M.I.T. Algebraic Geometry Seminar

## DISCREPANCIES AND TERMINATION OF FLIPS

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### Abstract:

Termination of flips and, more generally, of log and of quasi-log flips follows from two expected properties of the minimal discrepancy (md) function on algebraic varieties:

1. semicontinuity of md's on any fixed variety, and
2. ascending chain condition (acc) of md's on varieties of given dimension.

This reduces the global statement on termination to two local ones. All known proofs of termination follow from this reduction. In particular, this gives the log termination in dimension 3, the special and canonical termination up to dimension 4.

To prove log termination in dimension 4, one only needs the acc in dimension 4 for the md values in the interval  $[-1,0]$ .

Tuesday, October 21

3:00 p.m.

MIT Room 4-153

<http://www-math.mit.edu/~jstarr/03fsem/>.