1035-13-588 **Emilie Dufresne*** (`emilie@mast.queensu.ca`), Department of Mathematics and Statistics, Jeffery Hall, University Ave, Kingston, Ontario K7L 3N6, Canada. *Separating Invariants.* Preliminary report.

The idea of separating invariants comes from the desire to distinguish the orbits of a group action on a finite dimensional vector space. This cannot be done in general, using just polynomial invariants, but we can still ask for a set of invariants to "separate" as much as the whole ring of invariants. In this talk I will define a notion of separation and I will discuss some interesting questions regarding separating sets. (Received September 11, 2007)