

# On the number of provable formulas

Marco Pedicini

Istituto per le Applicazioni del Calcolo "Mauro Picone" – C.N.R.

`marco@iac.cnr.it`

(joint work with Q. Puite)

This work is a first step in the study of combinatorics of proof nets: proof nets are pure geometrical objects issued from the study of linear logic, they are intended to capture the non-bureaucratic aspects of proofs in sequent calculus; in fact, they can be obtained from proof structures (pure combinatorial nets of rules (or links)) by adding a constraint known as “correctness criterion ” (usually cited in the Danos-Regnier form). We try to establish the exact ratio between proof structures and proof nets, unfortunately we can obtain only an upper-bound and a lower-bound.