



## LOGIC AND COMPUTATION

### Closed Rewriting - Checking overlaps of Nominal Rewriting Rules.

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17h10 - 17h40

Math Department- Mini Auditorium

#### Abstract.

Nominal rewriting is not complete for equational reasoning in general; however, closed nominal rewriting is complete for equational reasoning with closed axioms [1]. Intuitively, no free atom occurs in a closed term, and, as a natural assumption, closed axioms do not allow abstracted atoms to become free. In this talk, we will analyze the confluence of nominal rewriting systems (NRS), we will check whether closedness can be useful/essential to guarantee the confluence of a NRS, and finally we will make some observations on possible extensions for proving confluence modulo equational theories.

This is joint work with Filippo A. E. Nuccio.

## References

- [1] . Fernández and M. J. Gabbay. Closed Nominal Rewriting and Efficiently Computable Nominal Algebra Equality In Proc. of 5th International Workshop on Logical Frameworks and Meta-languages: Theory and Practice (LFMTP), 37–51, 2010.