

## Cofinal stable logics

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Recently, Bezhanishvili and Bezhanishvili developed an algebraic treatment of canonical formulas by using the locally finite  $(\wedge, \vee)$ -reduct of Heyting algebras [1]. In this talk, we will show that the  $(\wedge, \vee, \neg)$ -reduct of Heyting algebras can be used in a very similar way.

First, we will see that the results about the  $(\wedge, \vee)$ -canonical formulas extend to our case. In particular, we obtain that all intermediate logics can be axiomatized by  $(\wedge, \vee, \neg)$ -canonical formulas. Now restricting a certain parameter in the  $(\wedge, \vee, \neg)$ -canonical formulas gives rise to a new class of intermediate logics that we call cofinal stable logics.

In the second part of the talk, we will investigate this class of logics. We will see that cofinal stable logics subsume stable logics but that there are continuum many more logics in our class. Moreover, we will see that cofinal stable logics have the finite model property. Finally, we will look at familiar intermediate logics and provide their axiomatizations in terms of  $(\wedge, \vee, \neg)$ -canonical formulas.

### REFERENCES

- [1] N. Bezhanishvili and G. Bezhanishvili, *Locally finite reducts of Heyting algebras and canonical formulas*. To appear in Notre Dame Journal of Formal Logic.