



## Invitation

Logic Colloquium

**Hadil Karawani**

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*Modal Logic and Modal Language: strength, duality and social meaning – a perspective from experimental semantics, database analysis, and cross-linguistic typology*

the talk will take place

on **Monday, 13.12.2021** at **15:15** over Zoom:

<https://zoom.us/j/98151452119?pwd=aTBOYkRKMnVxT1I5Zm1Hb2FPdmp3dz09>

Meeting ID: 981 5145 2119

Passcode: 663344

All interested are welcome to attend

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**Abstract:** It is a "usual assumption" of literature on modality that (epistemic) must is the semantic dual of might (c.f. von Fintel & Gillies 2010, Willer 2013, Lassiter 2016). However, this view is not universal. Building on previous work (Karawani 2014, Crespo, Karawani and Veltman 2018, Karawani and Waldon 2017), I propose a dynamic analysis of epistemic modality according to which might p is weaker than may p; and that in theory, at least, may p (and not might p) is the semantic dual of must p; while might p is the dual of the plain (non modal) proposition p. My discussion will appeal to database analysis of English and an experimental paradigm, and discuss the role of social meaning as an expressivist strategy. This will help determine where and why the literature has been lead astray. I then go on to discuss the semantics of must. Within this theory, epistemic must expresses universal quantification over epistemically likely worlds (a subset of epistemic possibility); evidential must however expresses something weaker, namely quantification over a larger set. This discrepancy between epistemic and evidential must has puzzled researchers trying to figure out a unified semantic account of must. I argue that must in its evidential reading behaves like a weak necessity modal due to quantifying

over the evidence set (a superset of epistemic possibility). By doing so, I provide a witness that falsifies the typological assumption according to which "the world's languages do not allow for weak-necessity epistemic modals (but only allow for weak-necessity deontic modals like ought and should)" (Fintel and Iatridou 2008, Iatridou and Zeijlstra 2013, Mirrazi & Zeijlstra 2021) . I conclude with a discussion of how the experimental paradigm may be extended and generalized to evaluate other claims that have been made in the literature regarding semantic duality (e.g. w.r.t. would, cf. Ward 2008).

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Carolin Antos, Salma Kuhlmann  
Coordinators of the Logic Colloquium