

# A Fresh Look at Commutativity

## Free Algebraic Structures via Fresh Lists

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28/11/2023

# Motivation: A Normal Form for Contexts

- syntax with binding, really want commutative-by-construction

# Contributions

# Fresh Lists

- fresh lists from Catarina, Agda stdlib

- Overview: where different choices for freshness get us
- Towards finite sets as sorted lists: – definition, union – idempotent commutative monoid – the free one – weird cats

# Wrap Up