We will continue online on Thursday, **February 18th, at 1pm on ZOOM platform** (for information how to acces seminar and next programme visit
this page
) by the talk:

Charles Walker

Distributive laws, pseudodistributive laws and decagons

Abstract:
The notion of a distributive law of monads was introduced by Beck [1], and gives a concise description of the data required to compose monads. In the two dimensional case, Marmolejo [4] defined pseudodistributive laws of pseudomonads (where the required diagrams only commute up to an invertible modification). However, this description requires a number of coherence conditions due to the extra data involved.

In this talk we give alternative definitions of distributive laws and pseudodistributive laws involving the decagonal coherence conditions which naturally arise when the involved monads and pseudomonads are presented in their extensive form [7, 3, 2, 6]. As an application, we show that of Marmolejo and Wood's eight coherence axioms for pseudodistributive laws [5], three are redundant. We will then go on to give (likely) minimal definitions of distributive laws and pseudodistributive laws, which further simplify the coherence conditions involved in this extensive viewpoint.

References

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