

We will continue online on Thursday, **19th of August, at 13.00 CEST** on [ZOOM](#) platform (for information how to access seminar and next programme visit

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) by the talk:

**Charles Walker**

## **The nerve of a relative monad**

Abstract:

In this talk we will consider an embedding of monads into double categories, which sends a monad  $P$  to its (concrete) double category of  $P$ -embeddings (also called  $P$  split monos), as well as generalizations of this embedding the setting of (well-behaved) relative monads. By considering a more general notion of monad morphism (motivated by the relative setting), we will understand this embedding as a fully faithful nerve which exhibits the terminal monad as 'dense' with respect to these more general morphisms.

We will then give two applications of this construction. Firstly, we will give another approach by which one arrives at the "decagon type" axioms of last time, and secondly we will give a simpler proof of the reduced form of pseudo-distributive laws involving lax-idempotent pseudomonads. Note that some parts are a work in progress.