

We will continue online on Thursday, **December 17th, at 1pm on [ZOOM](#) platform** (for information how to access seminar and next programme visit

[this page](#)

) by the talk:

Gabriele Lobbia (University of Leeds)

Distributive Laws for Relative Monads

Abstract:

Monads are useful tools both in mathematics (especially in universal algebra) and in computer science. An important notion is that of a distributive law between two monads, which goes back to fundamental work of Jon Beck in the late '60s. This notion describes how two monads can interact with each other, an analogue of the ring distributivity of product over sum.

In recent years, a generalisation of monads has been studied, relative monads, where we drop the endofunctor requirement. This definition relies on an extension operator instead of a multiplication. We will start by reviewing the notion of distributive law. Then we will introduce relative monads and see what the right counterpart of distributive laws is when we consider a monad and a relative monad.