Enriched Meanings

Language can be understood abstractly as a mapping between form and meaning. Linguistic theory uses structures (basic elements and relations between them) to represent form (phonology), meaning (semantics) and the structures mediating them (syntax). Mappings between different linguistic representations (interfaces) can therefore be understood as mappings between structures. Category theory is a branch of mathematics that is concerned with such structural mappings, and is therefore well-placed to help us understand how linguistic structures may, when necessary, be mapped to more complex structures. In this talk, I will present a research program developed together with Dr. Gianluca Giorgolo, in which we apply category theory and, in particular, the concept of monads, to problems in semantics and pragmatics. We call this research program ‘Enriched Meanings’, as the monadic formalism allows us to enrich standard semantic interpretation in order to capture certain complex phenomena. I will present our work on conventional implicatures, conjunction fallacies, and substitution puzzles, paying particular attention to the last case and focusing on the intuitions behind the approach, rather than on the formal details.