## A Concrete Presentation of Game Semantics

## William Blum

(joint work with Luke Ong)

We briefly present a new representation theory for game semantics which is very concrete: instead of playing in an arena game in which P plays the innocent strategy given by a term, the same game is played out over (a souped up version of) the abstract syntax tree of the term itself. The plays that are thus traced out are called *traversals*. More abstractly, traversals are the justified sequences that are obtained by performing parallel-composition less the hiding. After stating and explaining a number of Path-Traversal Correspondence Theorems, we present a tool for game semantics based on the new representation.

William Blum
Oxford University Computing Laboratory, UK
William.Blum@comlab.ox.ac.uk