GUILLAUME BRUNERIE, Institute for Advanced Study *An elementary definition of globular weak* ∞ -groupoids

Combining Grothendieck's definition of weak ∞ -groupoids with ideas originating from dependent type theory, one can obtain a simple, explicit and elementary definition of globular weak ∞ -groupoids. I will present this definition and discuss some work in progress related to the development of homotopy theory and higher category theory based on globular weak ∞ -groupoids. No prior knowledge of type theory will be needed.