

## THE GRAPH CONCEPTION OF SET

LUCA INCURVATI

*Abstract:* The non-well-founded set theories described by Aczel (1988) have received a wealth of attention from mathematicians and computer scientists, but have been largely ignored by philosophers. At the root of this neglect may lie the impression that these theories do not embody a conception of set, but are rather of mere technical interest. My talk attempts to dispel this impression. I will present a conception of set which may be taken as lying behind a non-well-founded set theory. I shall argue that the axiom AFA is justified on the conception, which provides, contra Rieger (2000), a rationale for restricting attention to the system based on this axiom. By making use of formal and informal considerations, I will then make a case that most of the other axioms of this system are also justified on the conception. I will conclude by commenting on the significance of the conception for the debate about the justification of the Axiom of Foundation.