Introduction

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This special issue of the *Notre Dame Journal of Formal Logic* features work related to the talks and presentations from the summer school "Set Theory and Higher-Order Logic: Foundational Issues and Mathematical Developments," which took place at the Institute of Philosophy in London, August 1–6, 2011. The local organizers were part of Øystein Linnebo's European Research Council-funded project Plurals, Predicates, and Paradox. Further organization and support was generously provided by the New Frontiers of Infinity Project (European Science Foundation), the Ideals of Proof Project (Agence nationale de la recherche), the Philosophy Department and Logic Group of the University of Notre Dame, the Munich Center for Mathematical Philosophy (Alexander von Humboldt Stiftung), and the Philosophy Department of Birkbeck, University of London.

The summer school was well attended (circa 80 total participants) and was split into two components, with five days of introductory and advanced tutorials, followed by a two-day workshop. We are thankful to the speakers for the large amounts of time that they devoted to the summer school, and we are very happy that so many of them could contribute to this special issue. The other contributors spoke on separate occasions to the Plurals, Predicates, and Paradox project on the topic of set theory and higher-order logic. One can find the slides for the tutorials and talks for the summer school at http://www.bbk.ac.uk/philosophy/our-research/ppp/summer-school and http://www.oysteinlinnebo.org/ppp/summer-school.

The topic of set theory and higher-order logic has of course been at the heart of classical developments in the foundations of set theory. For instance, there is Gödel's famous idea that one can conceive of the cumulative hierarchy of sets as an extension of second-order logic, third-order logic, and so on, into the transfinite. Likewise, there is Kreisel's important observation that Zermelo's quasi-categoricity theorem indicates that the continuum hypothesis is decided by certain varieties of the semantics for second-order logic, in spite of its deductive independence from the first-order axioms of set theory. Finally, there is the old idea that large cardinal axioms themselves can be motivated by so-called reflection principles, which posit that the universe cannot be distinguished from its initial segments by various first- or higher-order resources.