LAURA CROSILLA AND ØYSTEIN LINNEBO, Definiteness in early set theory. Department of Philosophy, IFIKK, University of Oslo, Postboks 1020, Blindern, 0315 Oslo, Norway.

E-mail: Laura.Crosilla@ifikk.uio.no.

Definiteness played a crucial role in early set theory. In this talk, we bring to light important aspects of definiteness, by distinguishing an intensional and extensional notions of definiteness. We explore different ways of developing these notions by Georg Cantor, Ernest Zermelo and Hermann Weyl. We consider especially Hermann Weyl's proposal. Weyl's interest on definiteness goes back to his "Über die Definitionen der mathematischen Grundbegriffe" [1], where he offered a clarification of the notion of definite property that Zermelo had employed in his axiomatization of set theory in 1908. Weyl's predicative reconstruction of analysis in *Das Kontinuum* [2] made crucial use of a specific rendering of extensional definiteness. We will see how Weyl proposed to construct in a purely logical way, by repeated application of a few principles of construction, extensionally definite properties of the natural numbers. He then took the extensions of those definite properties as key components of the foundation of his predicative analysis.

[1] H. Weyl. Über die Definitionen der mathematischen Grundbegriffe. *Mathematisch-naturwissenschaftliche Blätter*, 7: 93–95 and 109–113.

[2] H. Weyl. Das Kontinuum: Kritische Untersuchungen über die Grundlagen der Analysis. Veit, Leipzig, 1918.