1053-03-317Laura Crosilla* (matmlc@leeds.ac.uk), School of Mathematics, University of Leeds, LS29JT, England. Operations and sets, constructively (Joint work with A. Cantini (Florence, Italy)).

Constructive operational set theory is a blend of two distinct traditions within the foundations for constructive mathematics: Aczel's constructive Zermelo Fraenkel set theory and Feferman's explicit mathematics. It is a constructive version of Feferman's recent operational set theory and of Beeson's intuitionistic set theory with rules.

In constructive operational set theory a notion of operation or rule is found aside the notion of constructive set. While sets are fully extensional, operations are non-extensional and partial.

We shall here present the salient elements of constructive set theory with operations as well as some recent work on weak systems. (Received September 08, 2009)