

1116-12-2663      **Joseph Michael DiMuro\*** (joseph.dimuro@biola.edu), 13800 Biola Ave., La Mirada, CA  
90639. *On  $On_p$ .*

One of John Conway's creations is the Field  $On_2$ . This Field consists of the Class of all ordinals, with the "minimal" definitions of addition and multiplication which turn the ordinals into a Field of characteristic 2. Much is known about the structure of this Field, due to the work of Hendrik Lenstra.

The question can then be asked: is there an analogous construction to turn the ordinals into a Field of characteristic  $p$ , for odd primes  $p$ ? In this talk, we will give such a construction, and analyze the resulting Fields  $On_p$ . It turns out that there are strong similarities between the Fields  $On_p$  for all primes  $p$ . (Received September 22, 2015)