Vertical recurrence relations for Stirling numbers of the second kind. Preliminary report.

For positive integers $k$, $m$ and $n$, the number of partitions of an $n$ set into $k$ nonempty subsets of size $\leq m$ is defined as the $(n,k)$-th $m$-restricted Stirling number of the second kind. Without the restriction $m$, the $(n,k)$-th Stirling numbers of the second kind is defined. In this talk, recurrence relations for the $m$ restricted Stirling numbers of the second kind and the Stirling numbers of the second kind, for fixed $k$, will be presented. (Received September 16, 2013)