## 1163-41-1029 Adel Faridani\* (faridani@oregonstate.edu) and Hussain Al-Hammali (h.hammali@ytit.uz). Sampling of bandlimited functions with faster convergence.

A family of sampling theorems for the reconstruction of bandlimited functions from their samples is presented. The theorems apply to both uniform sampling and a large class of non-uniform sampling sets. Taking a few additional samples is shown to yield more rapidly convergent series with lower truncation errors. The additional samples may be values of the function itself and/or its derivatives. Numerical illustrations are presented. (Received September 14, 2020)