1046-40-1975 Constantine Georgakis* (cgeorgak@condor.depaul.edu), Department of Mathematics, DePaul University, 2320 North Kenmore Ave., Chicago, IL 60614-, IL. Reverse Sharp Inequalities for the Sequence-to- Function Hausdorff Transformation. Preliminary report.

In Proc.Amer.Math.Soc. Vol. 103 (1988), pp. 531-542, the author established a sharp inequality for the sequence-to-function Hausdorff transformation and its adjoint, which are generated by a completely monotone function, as mappings between the Lp space with power weighted norm to the sequence space lp with Pocchammer power weighted norm for p greater or equal to 1. A sharp analogue of this inequality is presented for the same transformation for positive functions and sequences in the case when p is between zero and 1 that leads to similar sharp inequalities for power series and moment sequences. The argument for the best constant is much different than that given in the cited paper and applies to the case when p is greater or equal to 1 as well. (Received September 16, 2008)