1043-22-95   **Freydoon Shahidi*** (`shahidi@math.purdue.edu`), Department of Mathematics, 150 N.
University Street, West Lafayette, IN 47907-2067. *Some Problems and Results in Harmonic*
Analysis with Origins in Automorphic Forms.

We shall discuss some of the problems that arise in the analysis of intertwining operators and local coefficients for representations of p-adic groups. These problems are inspired and motivated by the theory of automorphic forms and Langlands functoriality conjecture. In particular, we will address certain questions in representation theory which can now be completely resolved by appealing to the local data provided to us by global transfers of automorphic forms. The results are general and require no residual characteristic restrictions. (Received August 20, 2008)