**JUN LE GOH**, University of Wisconsin-Madison Inseparable  $\Pi_1^1$  sets

We investigate analogs of the theory of effectively inseparable pairs of recursively enumerable sets to  $\Pi^1_1$  sets of numbers and  $\Pi^1_1$  sets of reals. These are used to derive completeness results, such as an unpublished result of Harrington about jump hierarchies.