On Dealing with Uncertainties from Kriging Models in Offline Data-driven Evolutionary Multiobjective Optimization (Supplementary Material)

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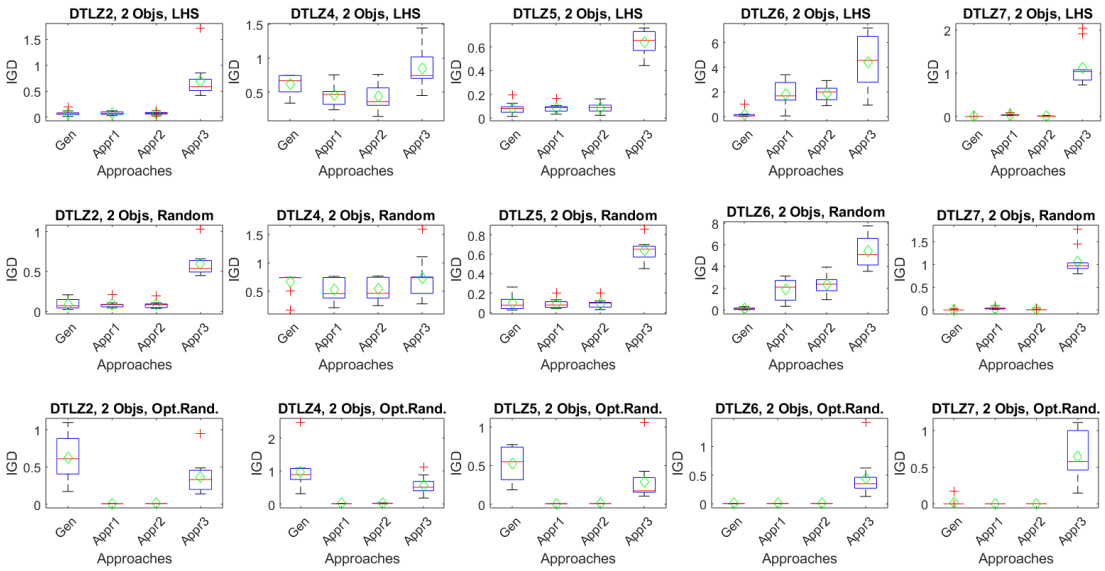

Figure 1: Box plot of IGD for 11 runs for two objective problems. "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.(Opt.Rand is optimal-random sampling)

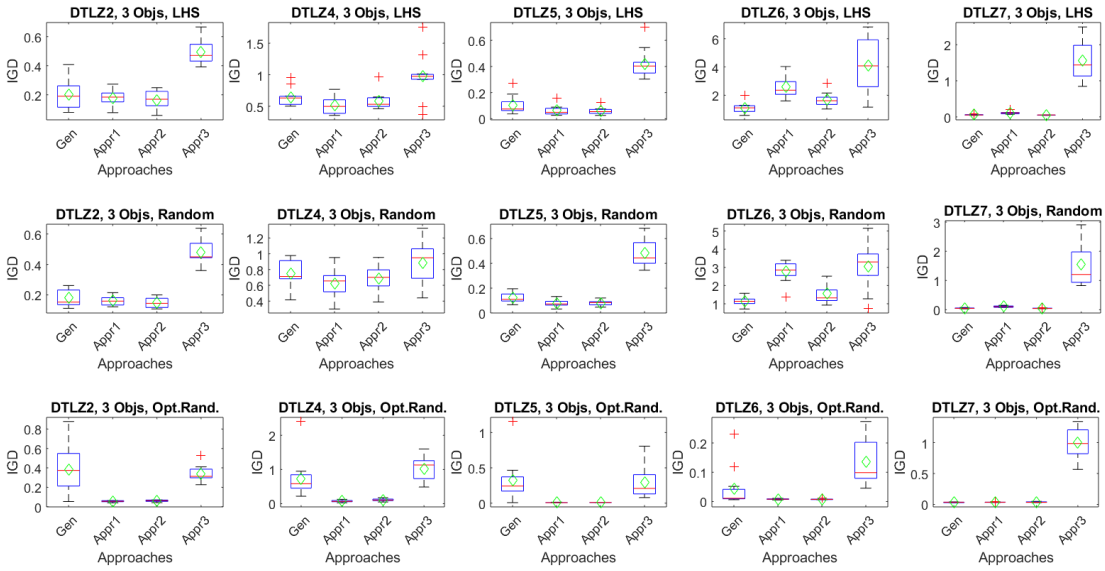

Figure 2: Box plot of IGD for 11 runs for three objective problems. "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.(Opt.Rand is optimal-random sampling)

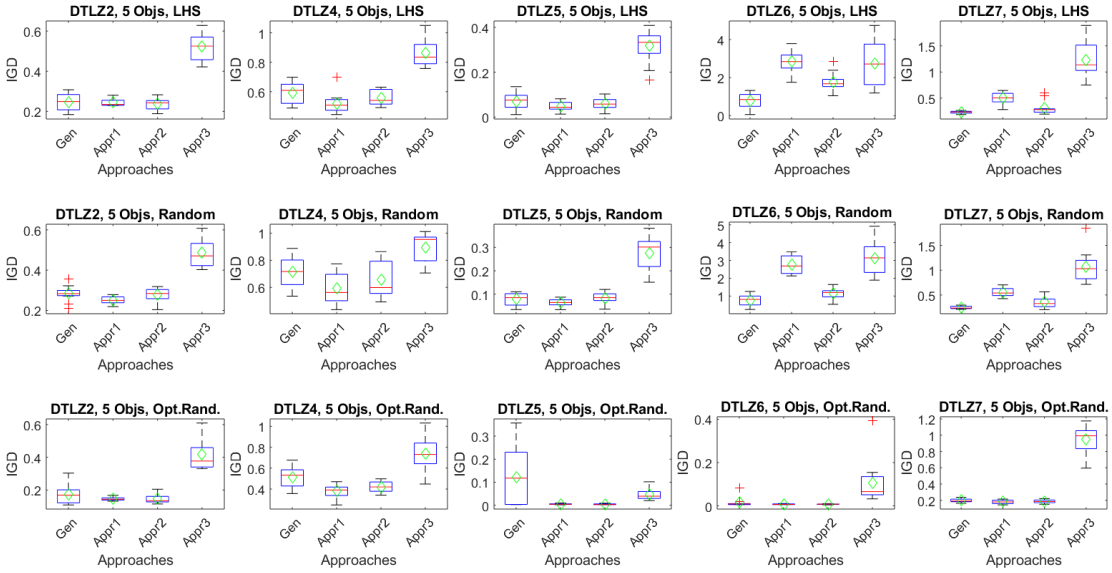

Figure 3: Box plot of IGD for 11 runs for five objective problems. "Gen","Appr1" , "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.(Opt.Rand is optimal-random sampling)

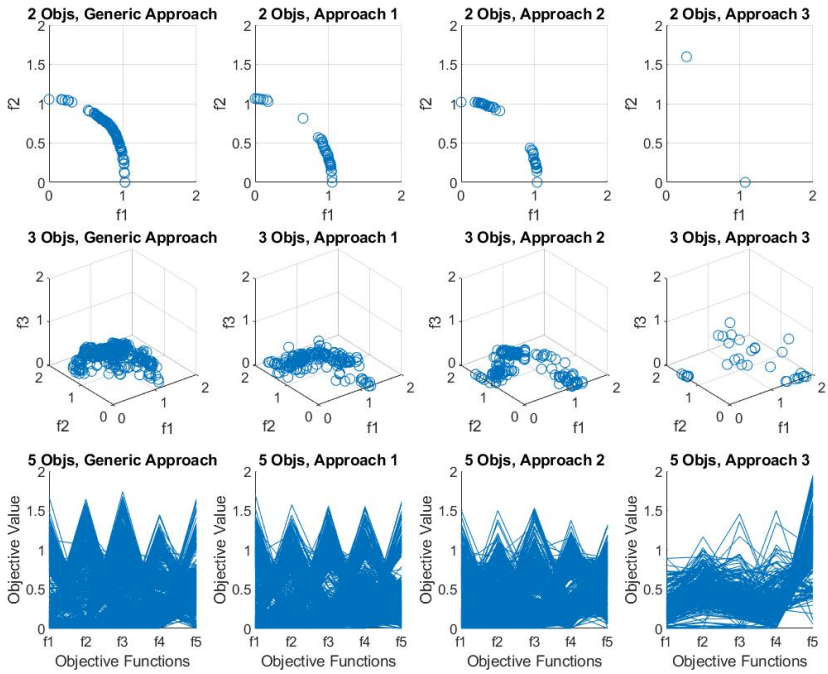

Figure 4: Final solutions obtained of the run with the median IGD value using different approaches for uniform random sampling for DTLZ2 Problem.

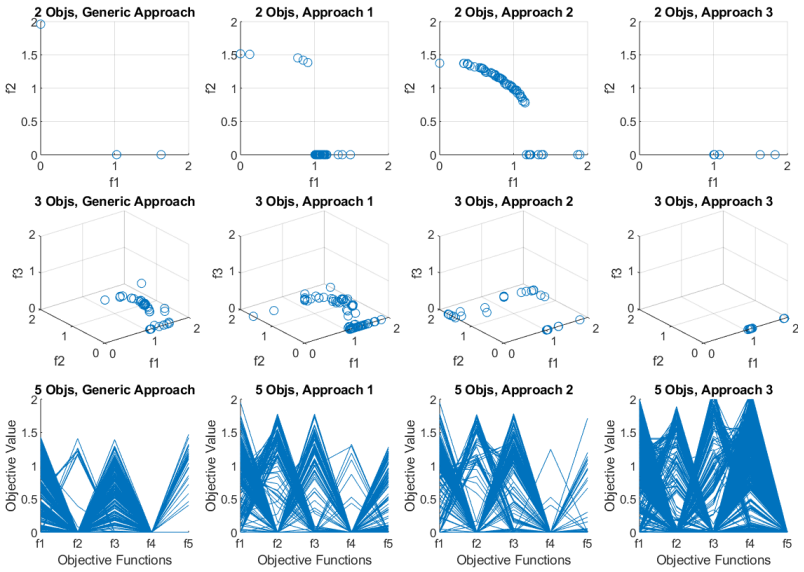

Figure 5: Final solutions obtained of the run with the median IGD value using different approaches for LHS sampling for DTLZ4 Problem.

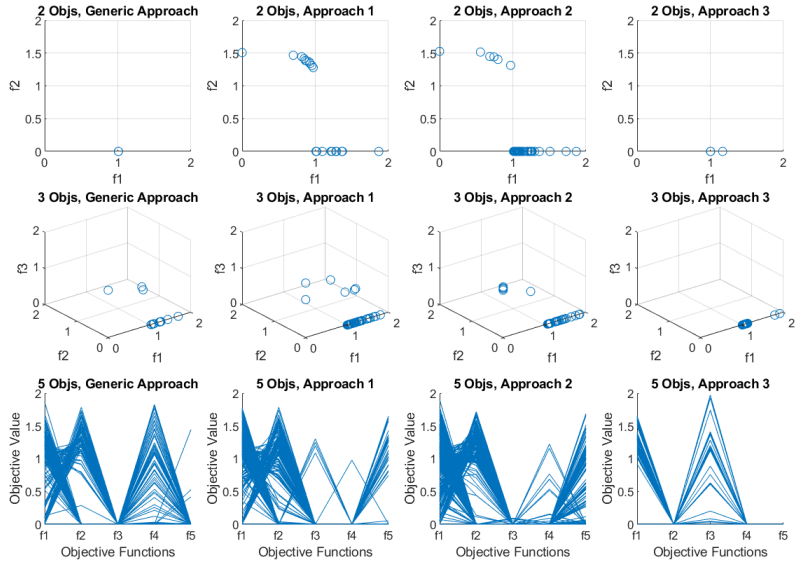

Figure 6: Final solutions obtained of the run with the median IGD value using different approaches for uniform random sampling for DTLZ4 Problem.

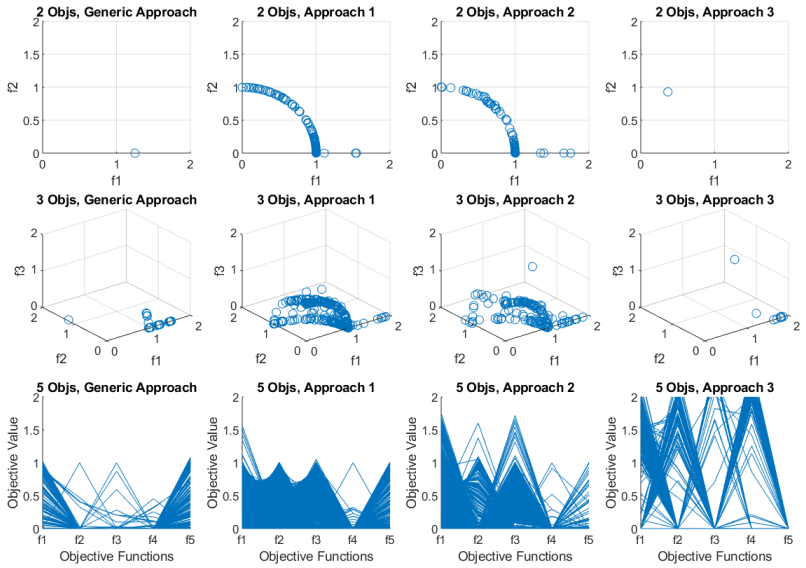

Figure 7: Final solutions obtained of the run with the median IGD value using different approaches for optimal-random sampling for DTLZ4 Problem.

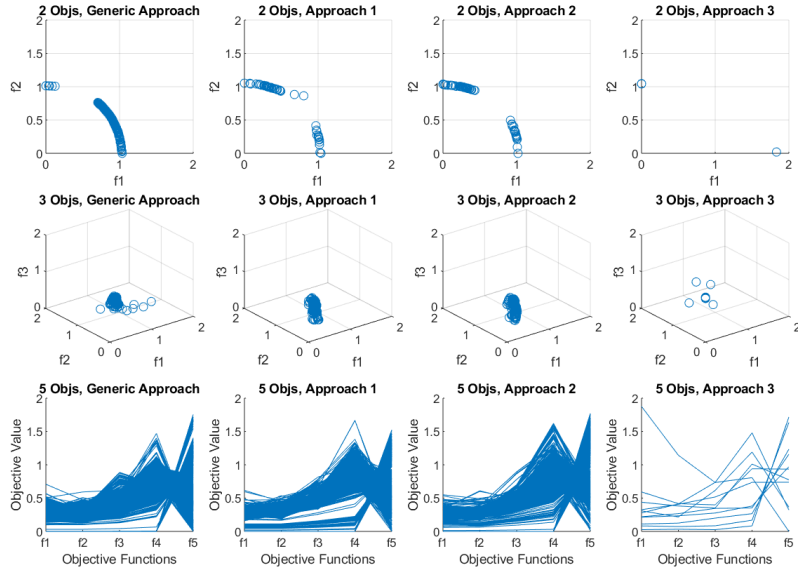

Figure 8: Final solutions obtained of the run with the median IGD value using different approaches for LHS sampling for DTLZ5 Problem.

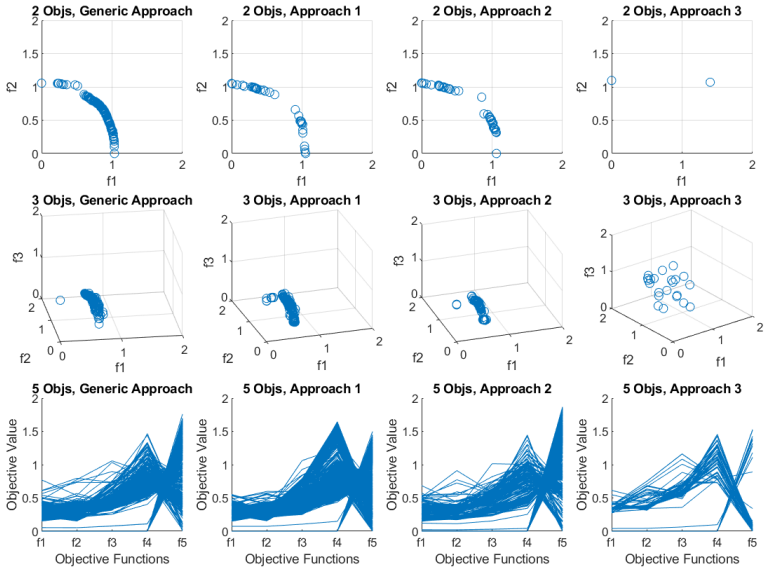

Figure 9: Final solutions obtained of the run with the median IGD value using different approaches for uniform random sampling for DTLZ5 Problem.

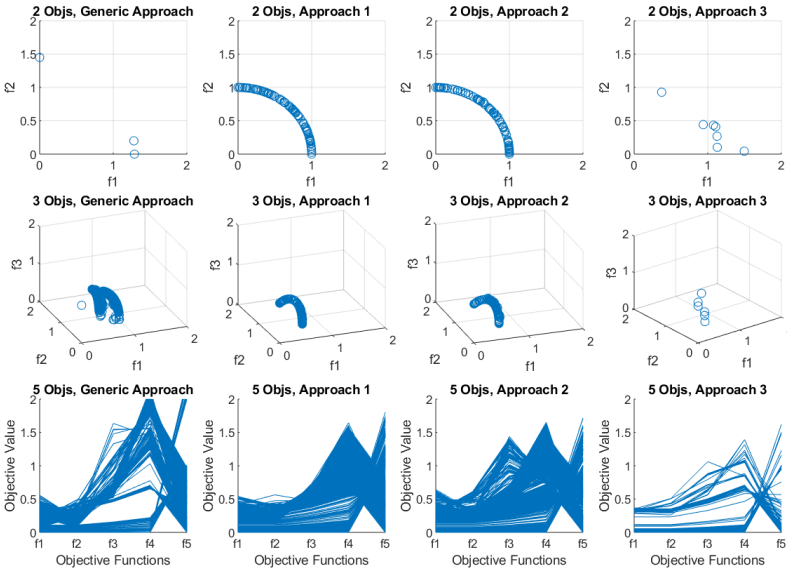

Figure 10: Final solutions obtained of the run with the median IGD value using different approaches for optimal-random sampling for DTLZ5 Problem.

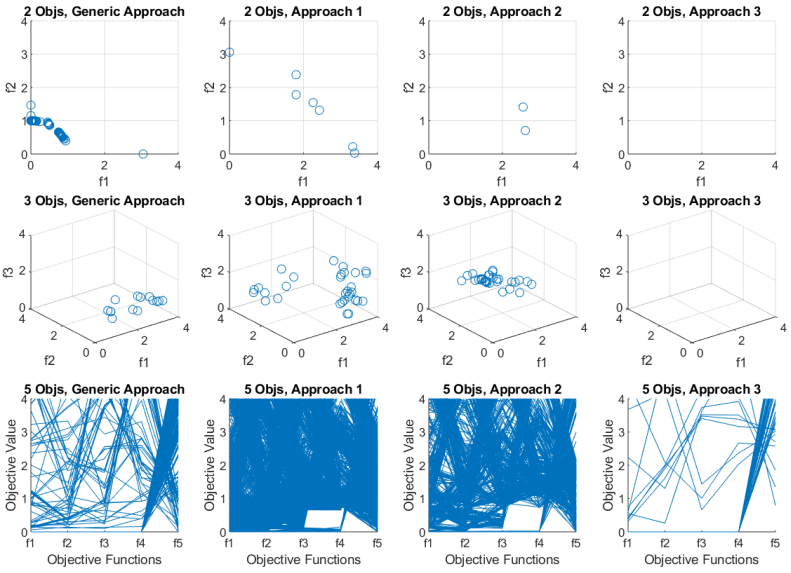

Figure 11: Final solutions obtained of the run with the median IGD value using different approaches for LHS sampling for DTLZ6 Problem.

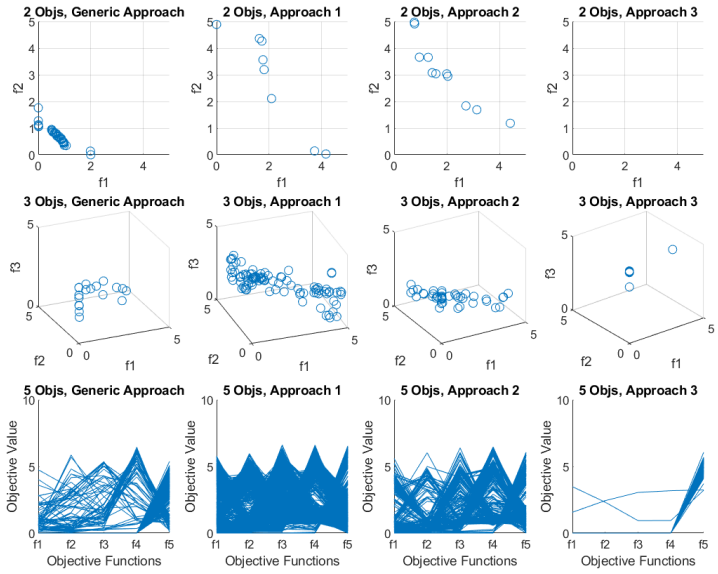

Figure 12: Final solutions obtained of the run with the median IGD value using different approaches for uniform random sampling for DTLZ6 Problem.

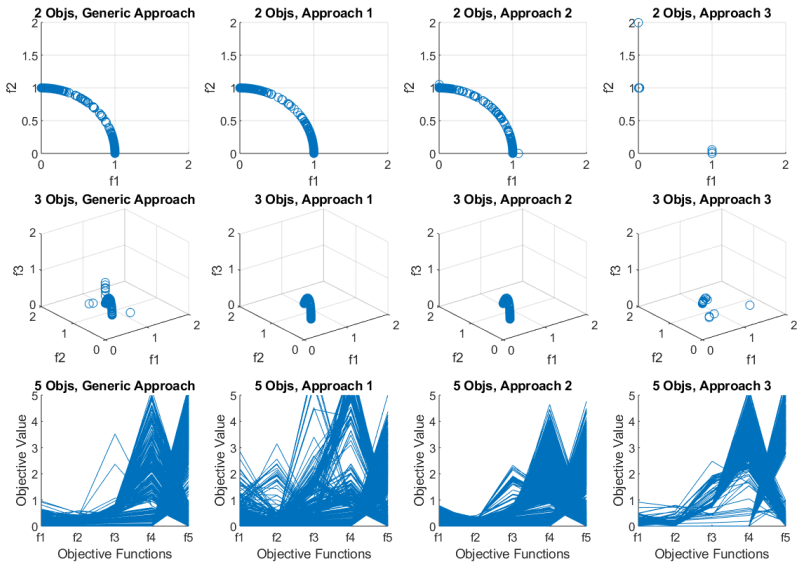

Figure 13: Final solutions obtained of the run with the median IGD value using different approaches for optimal-random sampling for DTLZ6 Problem.

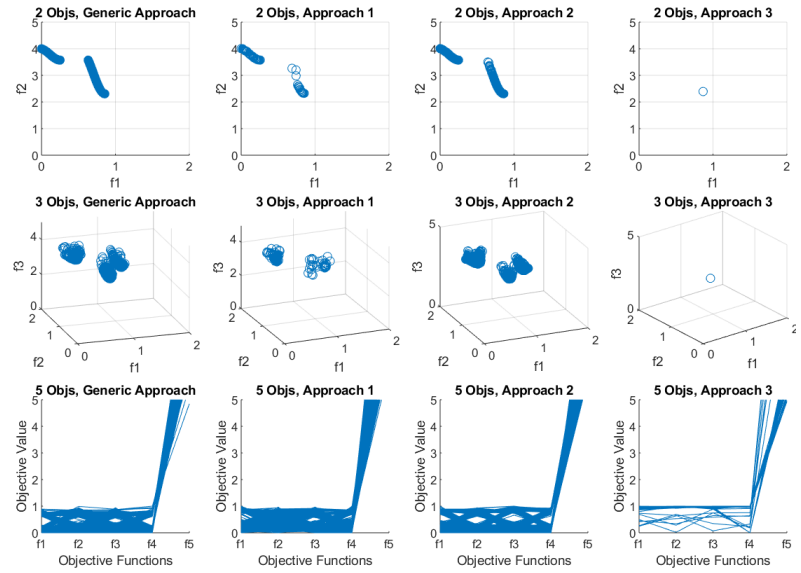

Figure 14: Final solutions obtained of the run with the median IGD value using different approaches for LHS sampling for DTLZ7 Problem.

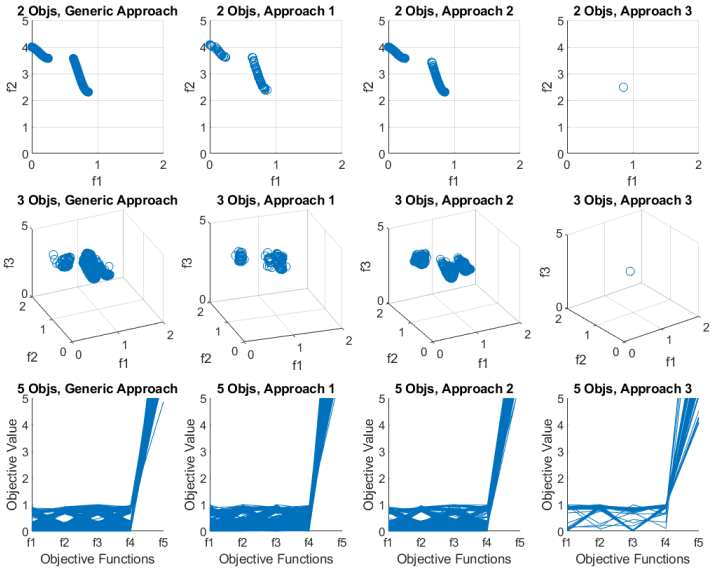

Figure 15: Final solutions obtained of the run with the median IGD value using different approaches for uniform random sampling for DTLZ7 Problem.

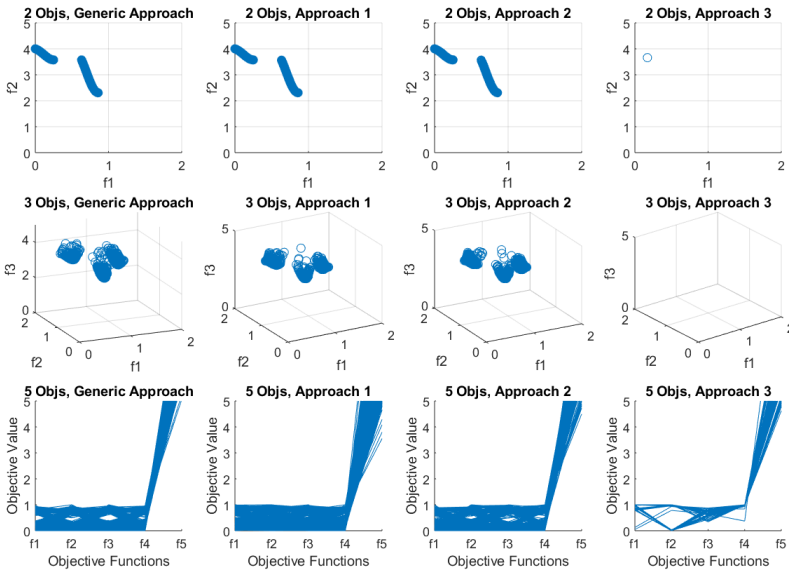

Figure 16: Final solutions obtained of the run with the median IGD value using different approaches for optimal-random sampling for DTLZ7 Problem.

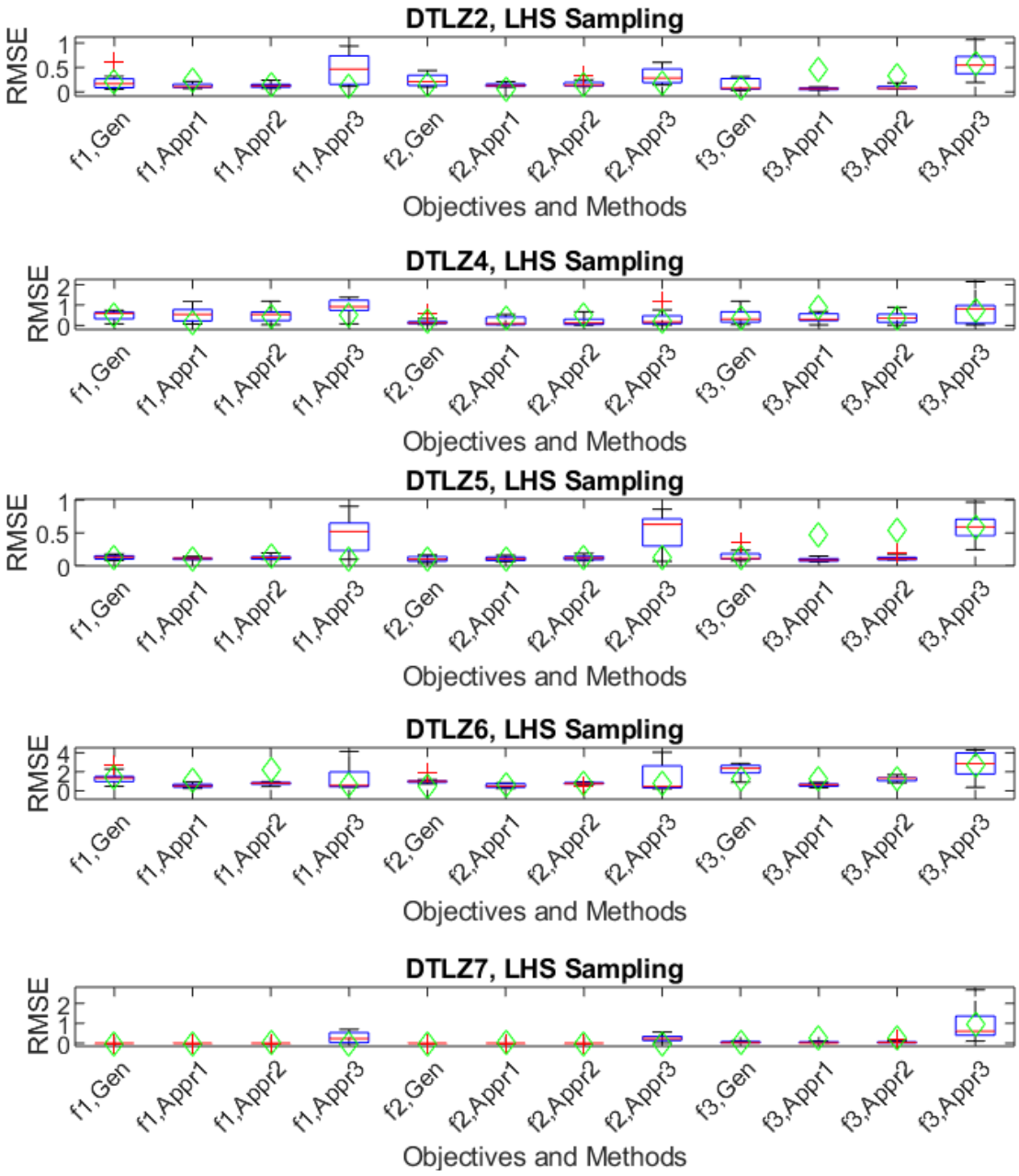

Figure 17: RMSE of the final solutions for three objective problems, LHS sampling. Here f1 and f2 are the objectives and "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.

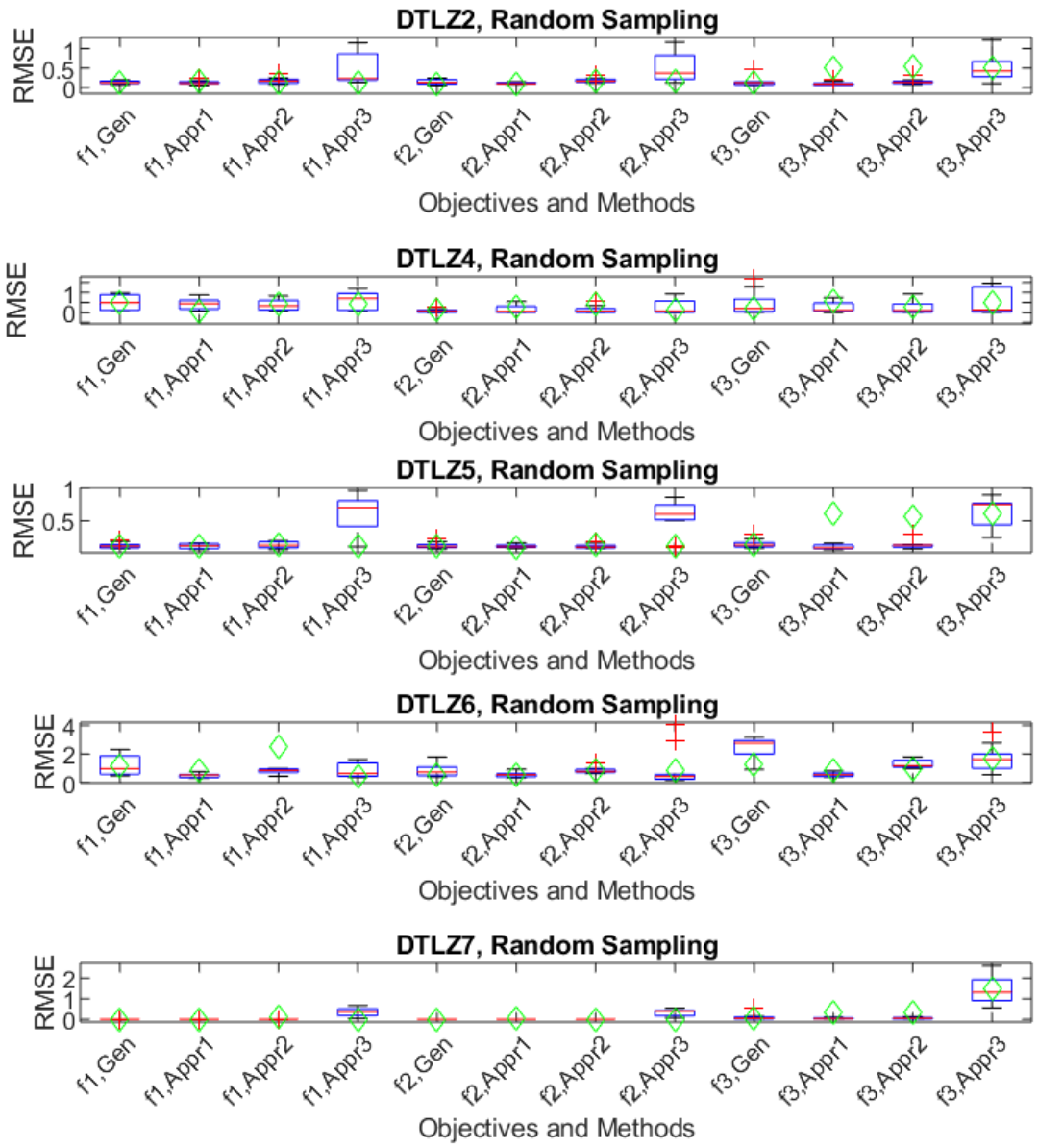

Figure 18: RMSE of the final solutions for three objective problems, Random sampling. Here f1 and f2 are the objectives and "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.

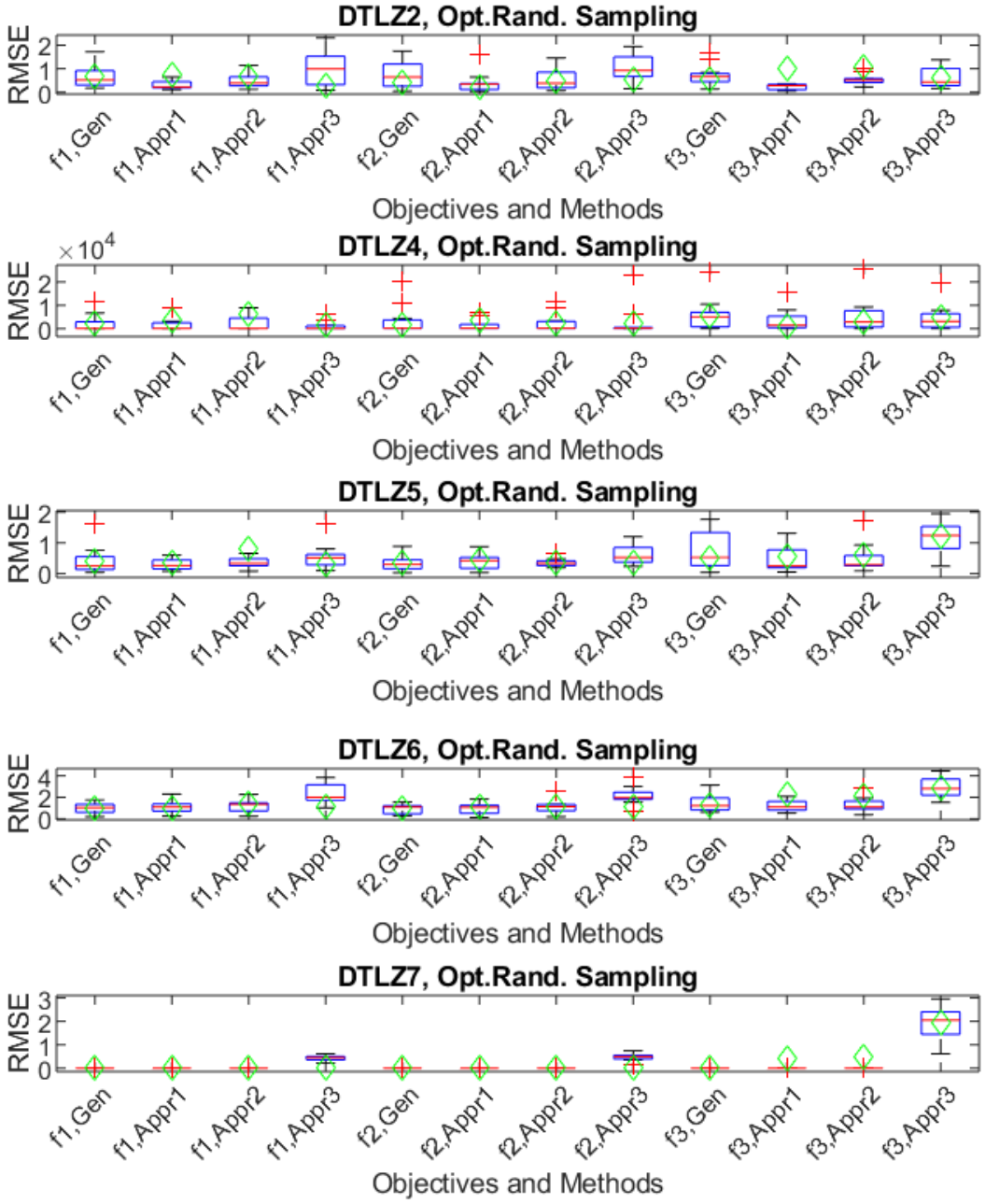

Figure 19: RMSE of the final solutions for three objective problems, optimal-random sampling. Here f1 and f2 are the objectives and "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.

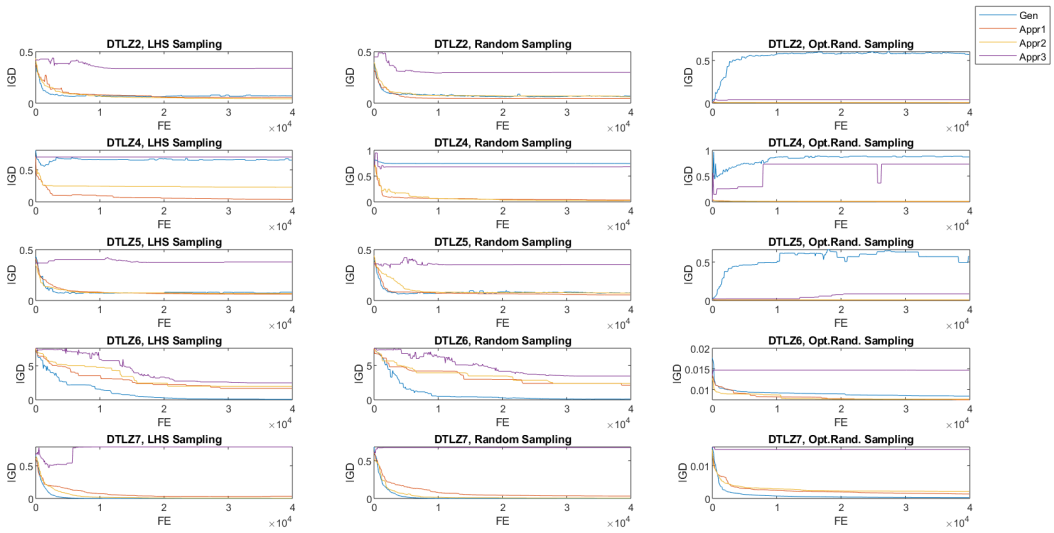

Figure 20: IGD variation with function evaluations for two objective problems. Here "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.

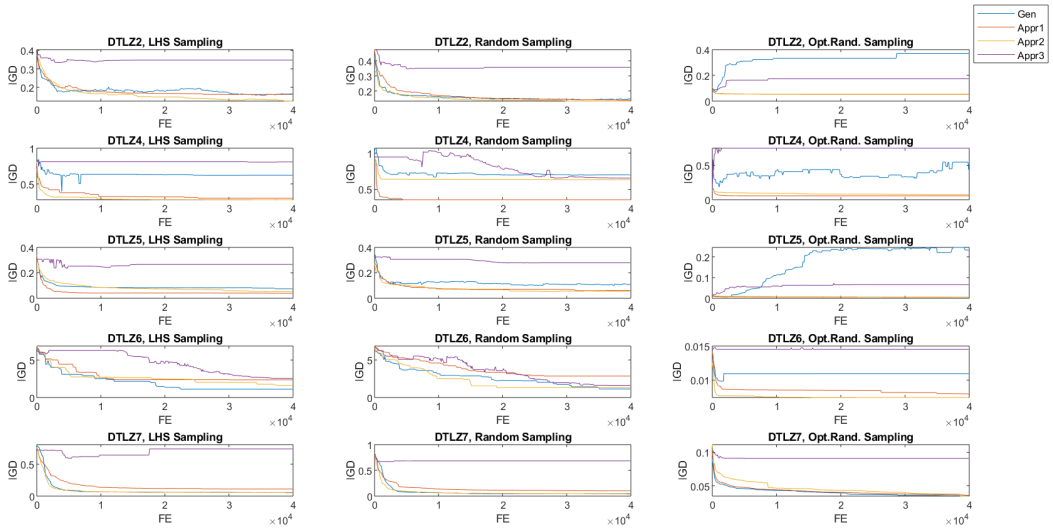

Figure 21: IGD variation with function evaluations for three objective problems. Here "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.

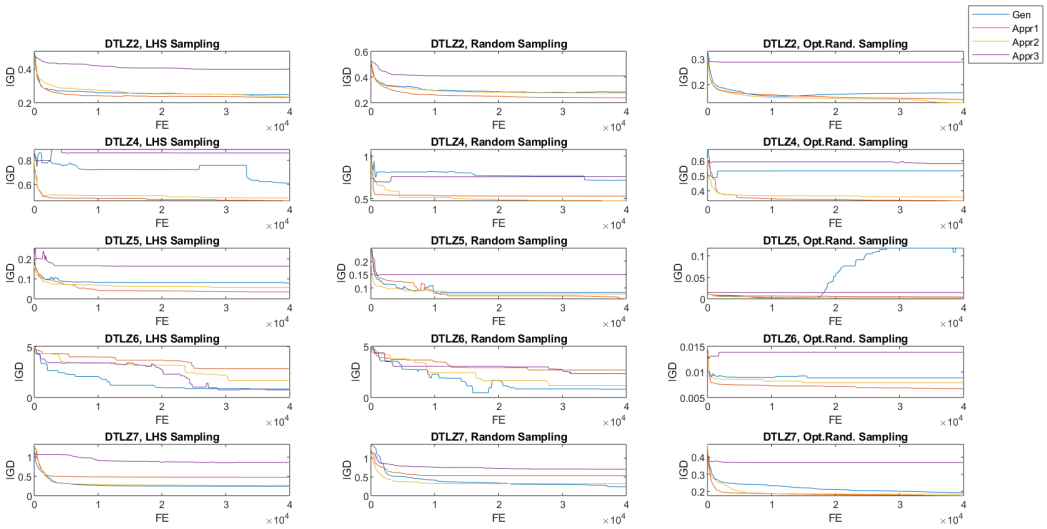

Figure 22: IGD variation with function evaluations for five objective problems. Here "Gen", "Appr1", "Appr2" and "Appr3" are the Generic, Approach 1, Approach 2 and Approach 3 respectively.