

# MOEAD<sub>N</sub>GSaII<sub>S</sub>PEA2<sub>S</sub>study4D

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## 1 Tables

Table 1: HV. Mean and standard deviation

	MOEAD	NSGAII	SPEA2
DTLZ1	$7.43e-01_{1.3e-01}$	$0.00e+00_{0.0e+00}$	$4.73e-01_{2.9e-01}$
DTLZ2	$4.53e-01_{3.0e-03}$	$3.75e-01_{2.3e-02}$	$5.23e-01_{6.8e-03}$
DTLZ3	$0.00e+00_{0.0e+00}$	$0.00e+00_{0.0e+00}$	$0.00e+00_{0.0e+00}$
DTLZ4	$4.00e-01_{8.7e-02}$	$3.74e-01_{4.1e-02}$	$5.10e-01_{3.6e-02}$
DTLZ5	$7.39e-01_{6.0e-04}$	$7.24e-01_{6.5e-03}$	$7.20e-01_{4.9e-03}$
DTLZ6	$9.51e-01_{7.4e-03}$	$4.25e-01_{3.1e-02}$	$9.11e-01_{1.4e-02}$
DTLZ7	$3.49e-02_{4.1e-03}$	$3.00e-03_{2.9e-03}$	$1.27e-01_{1.4e-02}$

Table 2: HV. Median and IQR

	MOEAD	NSGAII	SPEA2
DTLZ1	$7.76e-01_{2.4e-02}$	$0.00e+00_{0.0e+00}$	$5.83e-01_{5.3e-01}$
DTLZ2	$4.53e-01_{4.9e-03}$	$3.76e-01_{2.8e-02}$	$5.22e-01_{9.3e-03}$
DTLZ3	$0.00e+00_{0.0e+00}$	$0.00e+00_{0.0e+00}$	$0.00e+00_{0.0e+00}$
DTLZ4	$4.54e-01_{1.1e-01}$	$3.76e-01_{5.4e-02}$	$5.22e-01_{1.5e-02}$
DTLZ5	$7.39e-01_{6.5e-04}$	$7.25e-01_{8.4e-03}$	$7.21e-01_{5.9e-03}$
DTLZ6	$9.52e-01_{8.3e-03}$	$4.27e-01_{5.1e-02}$	$9.11e-01_{2.0e-02}$
DTLZ7	$3.47e-02_{5.2e-03}$	$2.25e-03_{3.5e-03}$	$1.29e-01_{2.1e-02}$

Table 3: IGD. Mean and standard deviation

	MOEAD	NSGAII	SPEA2
DTLZ1	$1.63e-02_{7.1e-03}$	$9.64e-01_{5.7e-01}$	$3.28e-02_{2.6e-02}$
DTLZ2	$1.35e-02_{2.4e-04}$	$1.29e-02_{7.5e-04}$	$8.33e-03_{2.2e-04}$
DTLZ3	$2.55e-01_{1.5e-01}$	$5.65e+00_{1.3e+00}$	$1.21e+00_{3.5e-01}$
DTLZ4	$2.49e-02_{1.5e-02}$	$1.62e-02_{8.1e-03}$	$1.20e-02_{9.4e-03}$
DTLZ5	$7.55e-04_{4.3e-05}$	$7.20e-04_{1.1e-04}$	$4.09e-04_{6.6e-05}$
DTLZ6	$1.71e-03_{7.4e-05}$	$7.92e-03_{3.3e-04}$	$2.11e-03_{3.0e-04}$
DTLZ7	$1.79e-02_{9.1e-05}$	$4.29e-02_{1.1e-02}$	$1.13e-02_{4.5e-03}$

Table 4: IGD. Median and IQR

	MOEAD	NSGAII	SPEA2
DTLZ1	$1.46e-02_{8.2e-04}$	$8.23e-01_{6.7e-01}$	$2.15e-02_{2.2e-02}$
DTLZ2	$1.35e-02_{2.6e-04}$	$1.29e-02_{9.8e-04}$	$8.32e-03_{2.6e-04}$
DTLZ3	$2.29e-01_{1.7e-01}$	$5.53e+00_{1.8e+00}$	$1.20e+00_{5.6e-01}$
DTLZ4	$1.38e-02_{2.4e-02}$	$1.35e-02_{1.7e-03}$	$8.56e-03_{5.0e-04}$
DTLZ5	$7.60e-04_{6.3e-05}$	$7.12e-04_{1.4e-04}$	$3.95e-04_{7.7e-05}$
DTLZ6	$1.70e-03_{1.0e-04}$	$7.88e-03_{5.3e-04}$	$2.13e-03_{4.0e-04}$
DTLZ7	$1.80e-02_{1.3e-04}$	$3.97e-02_{1.3e-02}$	$1.04e-02_{9.8e-04}$