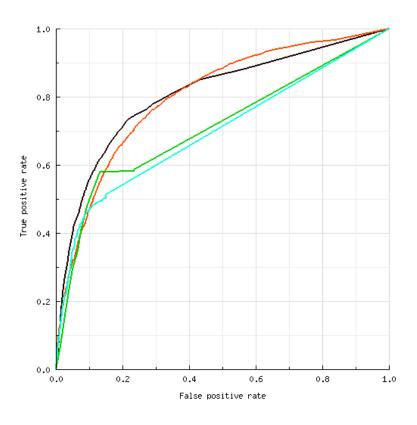
# StAR Report for the Analysis of ROC Curves

Generated at http://melolab.org/star July 6, 2020

# 1 ROC Plots





# 2 Summary Statistics

| Classifier | AUC    | Inverted | ACC    | ОТ     | fp     | $\mathbf{tp}$ | N    | P    |
|------------|--------|----------|--------|--------|--------|---------------|------|------|
| ispred     | 0.8076 | +        | 0.7614 | 0.0900 | 0.2142 | 0.7317        | 5243 | 4316 |
| dockpred   | 0.8018 | +        | 0.7399 | 0.1230 | 0.1883 | 0.6527        | 5243 | 4316 |
| rfscore    | 0.7113 | +        | 0.7376 | 0.0910 | 0.1326 | 0.5799        | 5243 | 4316 |
| predus     | 0.6985 | +        | 0.7060 | 0.0780 | 0.0929 | 0.4618        | 5243 | 4316 |

AUC: area under the ROC curve. ACC: maximal accuracy.OT: optimal threshold.

fp: false positive rate at OT. tp: true positive rate at OT.

N: number of negative instances. P: number of positive instances.

# 3 Statistical Analysis I

|          | ispred  | dockpred | rfscore | predus  |
|----------|---------|----------|---------|---------|
| ispred   | -       | 0.00579  | 0.09632 | 0.10909 |
| dockpred | 0.27872 | -        | 0.09053 | 0.10330 |
| rfscore  | 0.00000 | 0.00000  | -       | 0.01277 |
| predus   | 0.00000 | 0.00000  | 0.00928 | -       |

Significance Level (alpha): **0.05** Upper Triangle: AUC differences

Bottom Triangle: p-values

**p-value** < 0.05 **p-value** > 0.05

Global p-value: N.D. (Matrix LSL  $^{\mathrm{T}}$  is singular)

# 4 Statistical Analysis II

|          | ispred    | dockpred  | rfscore   | predus    |
|----------|-----------|-----------|-----------|-----------|
| ispred   | 2.0626e-5 | 6.2820e-6 | 8.9132e-6 | 5.0569e-6 |
| dockpred | 6.2820e-6 | 2.0494e-5 | 7.0297e-6 | 7.7193e-6 |
| rfscore  | 8.9132e-6 | 7.0297e-6 | 2.3382e-5 | 1.0043e-5 |
| predus   | 5.0569e-6 | 7.7193e-6 | 1.0043e-5 | 2.0811e-5 |

Covariance Matrix