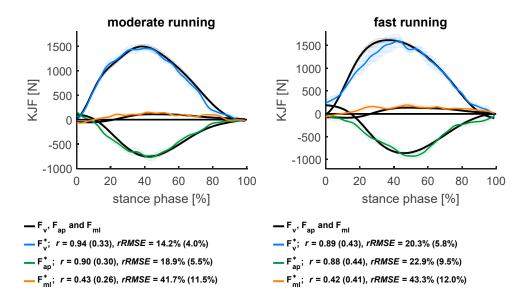
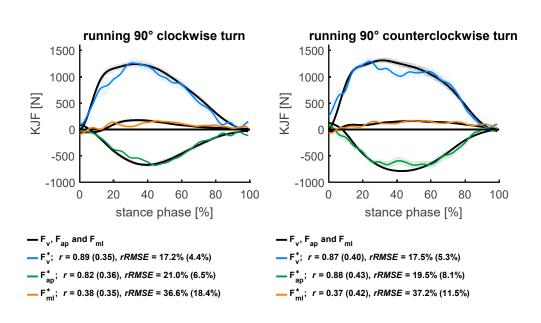
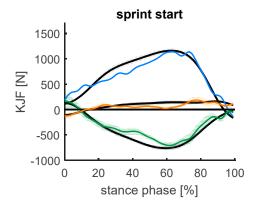
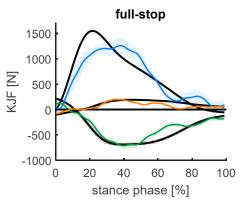
Supplementary Figures: Knee joint forces (KJF) time series of all movements

r: Pearson's correlation coefficient; rRMSE: relative root-mean-squared error; OLJ: one-leg jump; TLJ: two-leg jump; mean (standard deviation)

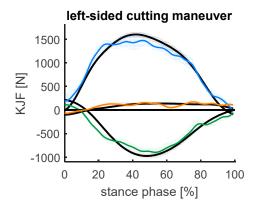


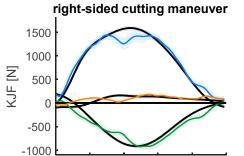






- F_v^* ; r = 0.73 (0.45), rRMSE = 25.9% (8.8%)
- F_{ap}^* ; r = 0.76 (0.40), rRMSE = 25.8% (9.3%)
- F_{ml}^* ; r = 0.31 (0.29), rRMSE = 43.3% (10.0%)
- F_v, F_{ap} and F_{ml}
- \mathbf{F}_{v}^{*} ; r = 0.78 (0.45), rRMSE = 24.7% (7.2%)
- F_{ap}^* ; r = 0.80 (0.34), rRMSE = 21.8% (7.5%)
- $--F_{mi}^*$; r = 0.45 (0.29), rRMSE = 37.7% (9.0%)





40

stance phase [%]

60

80

100

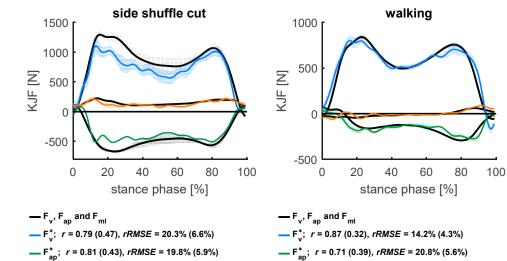
- F_{v}^{*} ; r = 0.86 (0.44), rRMSE = 19.4% (6.6%)
- F_{ap}^* ; r = 0.86 (0.41), rRMSE = 22.0% (7.3%)
- F_{ml}^* ; r = 0.30 (0.42), rRMSE = 44.8% (13.0%)

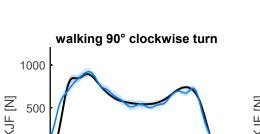
0

- F_v^* ; r = 0.86 (0.39), rRMSE = 19.0% (5.4%)

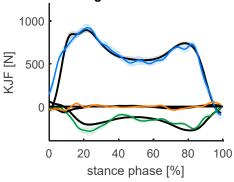
20

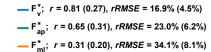
- F_{ap}^{*} ; r = 0.84 (0.35), rRMSE = 21.4% (5.2%)
- F_{ml}^* ; r = 0.25 (0.39), rRMSE = 45.7% (9.0%)





-- F_{ml}^* ; r = 0.35 (0.45), rRMSE = 36.5% (9.3%)





1000 KJF [N] 500 0 -500

40

60

stance phase [%]

80

100

walking 90° counterclockwise turn

 \mathbf{F}_{ml}^* ; r = 0.60 (0.31), rRMSE = 27.7% (5.7%)

— F_v, F_{ap} and F_{ml} F_{v}^{*} ; r = 0.83 (0.29), rRMSE = 15.3% (4.0%) \mathbf{F}_{ap}^* ; r = 0.64 (0.30), rRMSE = 22.7% (5.8%) F_{ml}^* ; r = 0.48 (0.34), rRMSE = 29.1% (6.0%)

20

0

