Climbing skill and complexity of climbing wall design: assessment of jerk as a novel indicator of performance fluency

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Figure 1 — Orientation and shape of the holds for the two routes. The arrow indicates the preferential edge grasping allowed by the hold.

Figure 2 — Differences of normalized jerk of hip trajectory between sessions for the complex route design (ie, double edges holds route; black line) and the simple route design (ie, horizontal edge holds route; dotted line).
Figure 3 — Differences of normalized jerk of hip orientation between sessions for the complex route design (ie, double edges holds route; black line) and the simple route design (ie, horizontal edge holds route; dotted line).
Figure 4 — Correlation between jerk of hips trajectory (x-axis) and jerk of hips orientation (y-axis) for the simple route design (4a) and the complex route design (4b).