

Resource Summary Report

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Functional calibration for trunk, lower- and upper-limb fixed inertial sensors

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Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.jznep5e>

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Summary: Calibration procedure for functionally aligning inertial sensors fixed to the shanks, thighs, trunk (e.g. sacrum, sternum), head, arms, and forearms / wrists. The movements were originally designed for analyzing skiing movements where the person is wearing ski boots. However, the same protocol can be applied also barefoot or with regular shoes. Please refer to the protocol's guidelines for more information how to obtain a sample data set and the matlab code needed to process the functional calibration.

Associated Publications: Fasel B, Spörri J, Schütz P, Lorenzetti S, Aminian K, An Inertial Sensor-Based Method for Estimating the Athlete's Relative Joint Center Positions and Center of Mass Kinematics in Alpine Ski Racing. Frontiers in Physiology doi: [10.3389/fphys.2017.00850](https://doi.org/10.3389/fphys.2017.00850)

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