INTERN

<file:///C:/Users/HP/Downloads/Documents/nbnfioulu-201611153040_2.pdf>

<https://pdfs.semanticscholar.org/3bfc/30c3a2814c6255564d9f2440a9516eb5637a.pdf>

Varus-valgus thrust is a biomechanical characteristic linked to knee osteoarthritis disease progression

[https://sci-hub.tw/http://dx.doi.org/10.1016/j.joca.2007.08.008](https://sci-hub.tw/http:/dx.doi.org/10.1016/j.joca.2007.08.008)

[https://sci-hub.tw/http://dx.doi.org/10.1016/j.clinbiomech.2016.09.007](https://sci-hub.tw/http:/dx.doi.org/10.1016/j.clinbiomech.2016.09.007)

Flexion and extension angle measure

<https://me.queensu.ca/People/Deluzio/JAM/files/03.5.10_Yang.pdf>

<https://ieeexplore.ieee.org/document/6091743>

<https://www.semanticscholar.org/paper/IMU-Based-Joint-Angle-Measurement-for-Gait-Analysis-Seel-Raisch/856e40be7b4a37ceac69e15db9205b5f78445c61>

<https://pdfs.semanticscholar.org/3908/e3aa7bb24b0f73693c7b5b84e8bc4971a0dc.pdf?_ga=2.38547370.844369963.1562677393-595743683.1559921258>

They then derived quarternions for the 30 m walking trial based on integration of angular velocity plus use of accelerometer data when the device was stationary to provide correction. Results produced by this fusion algorithm (Favre et al., 2006) were benchmarked against a Polhemus system and gave mean errors of 1 deg for knee flexion/extension. We assume that their errors would increase with the distance walked because of the integration of rate gyro biases.

need to see