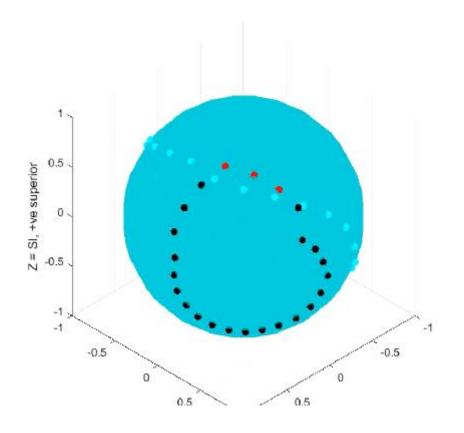


Definition of metrics taken from the shape-motion model

## Metric: Incidence of impingement





Where the cam-neck edge point move past the acetabular rim points during a motion case an occurrence of impingement is recorded.

These occurrences are summed up over the subjects doing a particular activity, and then summed up over all the activities.

The incidence metric is affected by the composition of the motion case dataset.

## Metric: Depth of impingement

For a single motion case the impingement depth is the greatest angle by which the cam-neck points have moved past the acetabular points.

The max and mean values of the impingement depth are taken across all subjects doing an activity. (In order to understand the trends.)

The mean values of the impingement depth are taken across all subjects doing all activities.

(Looking a mean across all motion cases is important as the hip shape cases and motion cases are not from the same subject and outliers are likely.)

