*YCM = t.*tan *.b/(b+a+t)*

t

*YSA = t.*tan **

b

a

Centripetal acceleration case:

Radius of circle, R = *(a+b) /* tan **

Centripetal acceleration = *V2.*tan * / (a+b)*

Centrifugal roll moment *MxC* = *m.h.V2.*tan * / (a+b)*

(h=CG height)

At a certain speed, *MxG* and *MxC* are equal and opposite:

Noting that *a + b + t ≈ a + b*, simplifying and rearranging, gives

For typical values of *t* (0.15m), *b* (0.8m) and *h* (0.7m), V=3mph

More nose-heavy bikes with longer trail will have a higher speed at which this occurs. Taller bikes go the other way.

Q: Where are Vision and Cross-Country on this metric?